

HOME  
Physics rationalization plan for  
London  
Future mapped out for BTEC  
Nuclear physics research centre to  
continue  
Tory group disagrees over higher  
education

NORTH AMERICA  
Bridging the high school gap  
Harvard criticized over suspect  
research  
OU moves to Maryland  
Boston residents oppose medical  
library

OVERSEAS  
UN peace research programme  
Reduction proposed in Australian  
tenured posts  
Japanese welcome foreign  
academics  
30 per cent rise in German  
students predicted

ARTICLES  
Jon Turney on the conflict  
between "big science" and  
slender resources, 9  
Benny Morris considers the  
intellectual climate in Israel, 8  
John O'Leary reports on the  
National Advisory Body's  
treatment of courses which fail  
to meet student number  
targets, 9  
H. J. Eysenck on *Mein  
Kampf*, 10  
H. T. Dickinson looks at the life  
of the great administrator and  
diarist, Samuel Pepys, 11-12  
Conall Boyce discusses the record  
of the CNA, 12

BOOKS  
Iain Wright reviews *Radical  
Economics: English Social  
Theory 1880-1980* by Fred  
Ingalls, 14  
Roy Douglas on the first volume  
of Richard Shannon's  
biography of Gladstone (15),  
J. L. Ackrill on Plato's *Phaedo*  
and *Protagoras* (16),  
Robert Wokler on Lantier, J.  
B. Morrell on the history of  
Imperial College (17),  
D. H. Metcalfe on medical ethics,  
Ann Oakley on test tube babies  
(18)

ECONOMICS BOOKS 19-22  
Reviews include M. J. C. Surrey  
on monetary policy, Keith  
Norris on rates of growth; E.  
T. Nevin on the outlook for  
Scotland, Colin Harbury on the  
political economy of big  
business

NOTICEBOARD 23

CLASSIFIED INDEX 24

OPINION 30-32

Bernard Crick on All's Well,  
Timothy Healy on the decline  
of tenure; Don's Diary from  
James Walvin of the University  
of York, 30  
Letters on the "crisis" in English  
studies; Turkey and the British  
Council, 31

## Next Week

M. F. Perutz on molecular  
biology and cancer  
Maurice Evans on genre  
New books on European studies  
Overseas students: the new order

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## Quality or opportunity?

The Department of Education and Science is urging the National Advisory Body to adopt a policy for the polytechnics and colleges that is almost exactly the opposite of the policy the University Grants Committee adopted for the universities in 1981, presumably with the approval of the DES. The NAB is being encouraged to ask the polytechnics and colleges to maintain their present number of students even if this means a deterioration of up to a quarter in existing staff:student ratios. Two years ago the UGC adopted the reverse policy, telling universities to cut student numbers in order to preserve standards, although the speed of the deceleration insisted on by the Government made some erosion of the unit of resource inevitable.

It is difficult to decide how seriously to take the DES's change of heart, which in any case is veiled in the usual bureaucratic Times change and so do political circumstances. Early in a Parliament a tough policy of preserving standards, even if it means a reduction in opportunity for young people, may feel right and even sound good, but in the year running up to a general election a more flexible policy that reduces the number of disappointed candidates (and their parents) may seem more expedient. This is probably an important motive for the change, but possibly not the most important one.

In any case such political expediency works its way through to higher education policy by a tortuous and indirect route. Two years ago the Treasury had a much firmer grip on public expenditure than it has today, mainly because of the electoral cycle. So the NAB in 1983 has a freedom to manoeuvre that was denied to the UGC in 1981. The UGC believed that it had no real choice but to limit student numbers because the alternative policy would have led to extra public expenditure on tuition fees and student grants, although the committee would probably have wanted to put standards before students anyway. Against a background

of ministers praising polytechnics and colleges for busting expenditure limits by admitting extra students, the NAB is clearly not subject to the same constraints.

It is probably wrong to place too much emphasis on these short-term tactical considerations in the context of the long-term strategic considerations in the context of Whitehall policy. The contrast between the DES's advice to the NAB and its endorsement of a quite different UGC policy probably reflects the Department's conviction that the two sectors of higher education should be treated in different ways. There is a vein of opinion within the DES that goes back at least to the early 1960s and probably much further which holds that the universities should be the relatively static sector of higher education, valuing quality more highly than quantity, and that the polytechnics and colleges should be the relatively dynamic sector, placing a higher priority on access than on standards.

It was largely because of this belief that the DES rejected the Robbins recipe for university expansion and substituted the development of the polytechnics. Enrolment statistics bear out this change of direction: in the 1960s the main thrust of the expansion of student numbers was in the universities, while in the 1970s the bulk of expansion took place in the non-university sector, particularly in the polytechnics. So the DES's discreet advice to the NAB is entirely consistent with a policy that has been in effective operation for more than 20 years.

Yet the NAB is left with the difficult choice of placing the highest priority on the expansion of opportunity at a time when resources are rapidly increasing is a much less controversial proposition than adopting the same priority at a time like the present when resources are being cut and the inevitable consequence would be a sharp deterioration in staffing standards. The NAB's choice is made more difficult by the determination of the polytechnics in particular to

protest against any policy that can be interpreted as second-class treatment. In any case the DES's rather blithe belief that there is a lot of spare capacity in the polytechnics and colleges and the Inspectorate's equally blithe assumption that students tend to be over-taught outside the universities are both highly suspect. They tend to gloss over the important facts that the students are more complex structures and more focused vocational objectives.

Yet there is an opportunity that the NAB could miss if it is too cautious. It can be argued that the universities have missed the mass UGC's policy of retrenchment in the face of the cuts has marked the final burying of the hopes for a liberalisation of the universities most influentially embodied in the Robbins report. This may be an exaggeration but it probably has a grating grain of truth. If it has, there are powerful implications. It would mean that for the first time the universities had abandoned their implicit claim to be all things to all men in higher education and their secret conviction that polytechnics were not different, just not as good.

This would present the polytechnics and colleges with a large opportunity. It is generally conceded that during the 1980s the growth points in higher education will be in continuing education, part-time courses, and other non-traditional forms. The universities, by their response to the cuts, have made it harder for them to satisfy these new demands, while the polytechnics and colleges, by their history and experience, will have an important advantage. This does not mean, of course, that the NAB should recklessly accept the DES's advice to pack the students in regardless of the consequences for staffing and other standards. But it probably does mean that the NAB should not pay excessive attention to aping the answer given to what was indeed a similar problem, but for different situations and circumstances.

## A charter for Buckingham

This game is based on a tale of three institutions of higher education. The winner is the person who is able to guess correctly which is most entitled to receive a Royal Charter.

Institution A enrolls 7,000 full-time and sandwich students, 5,000 of whom are studying for degrees; another 3,000 part-time students. It has seven faculties ranging from art and design and humanities through social studies and management to science and engineering. It attracts more than £600,000 a year in research grants. Its annual budget is around £19m.

Institution B has 1,700 full-time students, again spread across most subjects, with the exception of engineering. It too has a significant stake in research. Institution C has 470 students; more than half from overseas. It concentrates on law, accountancy, and business economics and languages. Life sciences are the only representatives of science and engineering. Its commitment to research is vestigial and very much based on the isolated enterprise of individual members of staff.

Institution A is Sheffield City Polytechnic. It is the Royal Charter and is likely to get (win) one.

Institution B is the New University of Ulster. It has a Royal Charter but is being forced to amalgamate with Ulster Polytechnic to form a polytechnic, because it is considered to be too small to maintain independent university status.

Institution C, of course, is the University College at Buckingham. It is the only institution of higher education in the country which does not have a Royal Charter.

ten-fold recognition and Ulster deserve to keep its Charter on precisely the same grounds?

Another disingenuous argument is that British higher education would benefit from greater diversity (right) and therefore that a degree free-for-all would be a healthy development (wrong). Traditionally we have been very parochial about the granting of full university status and have tended to over-control academic standards in the non-university sector.

The outcome may be a lot of irritation but it is also light and secure standards. Even if this traditional policy is to be scrapped in favour of a new policy of *caveat emptor*, Buckingham, which is really a medium-to-small college of higher education when its ideological gift wrapping has been taken off, seems a strange place to start such a reckless experiment.

The founding principle of Buckingham was that it should be entirely free from state control. That principle has been comprehensively undermined by the college's job for its students. Now it has been compromised again by the successful campaign to win a Royal Charter. A free university, which is what Buckingham aspires to be, should not require the bureaucratic interference of the state.

The simple truth is that Buckingham has never been granted a Royal Charter, and more important, it should never have

## Laurie Taylor



### Appointments

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More or less any serious applications are invited for an enormous important position in the Civil Service which would not usually be advertised in the press, but quite honestly in this instance, we've sounded out God knows how many people, and one or two you'd think would be glad of the money, and they've turned it down.

Anyway, Applications are invited for this extremely senior position which involves taking over the leadership of a high-powered committee whose principal task is the formulation and implementation of policy in relation to, well, lots of big things and facilities dotted around all over the country from Sussex to Shetland the general area of higher education (but not polytechnics).

The person we are looking for is well, "searching for" might be a better term - I mean, we want someone who is at the end of February with very little notice to show for all those expensive lunches and telephone calls - would you the type of easygoing and flexible personality which would enable them to retain a pleasant illusion of personal autonomy following regular and almost completely one-sided negotiations with people who tell them exactly what to do.

In this connection an ability to talk fairly seriously while employing wily phrases as: "We've certainly emphasized the difficulties involved" and "buffer between central authority and the universities" (whoops!) The necessary drawing up of educational priorities for the future; and "We are in the process of producing a paper in which the criteria are clearly laid out", would be an advantage.

The successful candidate would also possess the somewhat unusual ability to make important decisions which affect the livelihood of hundreds of people on the basis of a generally out-of-date, quite out-of-date, and pretty misleading information. We reference to this aspect of the position, it might be a slight advantage if the candidate was able to use a pocket calculator, draw up a rough alphabetical order and throw two dice simultaneously down a long polished table.

We realize we're in no position to be fussy - so we're not actually talking about first class degrees or even good. A level grades - but generally speaking, the educational and occupational background of the successful candidate should be very similar to that of the other committee members in order to ensure that there is no serious break in the established practice by which members annually reduce the resources of those institutions with which they are least familiar. (In addition some preference may be given to candidates who can offer an Advanced Diploma in Post Hoc Rationalization).

Finally, although we can't make any promises, it might be worth mentioning that clearest evidence of particular heroism in carrying out difficult orders in the face of rational and sustained opposition during one's term of office may constitute grounds for the award of a VC.

# The Times Higher Education Supplement

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## European research summit called

by Karen Gold

A summit of Europe's science ministers is likely to be held in 1984 to discuss ways to keep up with the growing research record of the United States and Japan.

The proposal for a summit has been made by M Jean Pierre Chevènement, the French minister for research and technology and an influential leader of the left in France's ruling Socialist Party. The plan is likely to be discussed at the next meeting of the European Council of Foreign Ministers in Strasbourg in April.

The French concern about the American threat is long standing. Almost 20 years ago Jean Jacques Servan Schreiber published the influential book *Le Défi Américain* which warned of the danger of multinational companies largely under American direction monopolizing high technology.

If the proposal is agreed, the invitation would probably be extended to European countries that

are not members of either the EEC or the Council of Europe such as Finland and Switzerland.

The impetus for the summit comes from fears that European research standards are falling far behind those of America and Japan that European scientists are no longer able to collaborate with their international counterparts.

Better training for scientists, particularly at postgraduate level, is considered the key to the problem within parts of the European Community and various member countries: hence the emphasis on inviting ministers responsible not only for research but also for higher education.

Subjects they are likely to discuss include the creation of a European science policy, the training of specialists in unusual fields, and the possible establishment of a European network of centres of excellence - a much wider concept, since it would include training as well as research, than the existing European co-operative ventures such as the European Centre for Nuclear Research (CERN) in Geneva.

The idea for a conference of ministers to define a European science policy came originally from Austria almost two years ago. Following a suggestion by the French President M Mitterrand last year that centres of European excellence be established, the French minister for research and technology M Chevènement made the present proposal. The French have already committed themselves to an increased budget for science.

The support of the European Economic Community would be needed and collaboration with Eastern Europe has also not been ruled out.

Such a summit would be welcomed by the Science and Engineering Research Council, according to a spokesman, and the Royal Society. Sir Arnold Burgen, foreign secretary of the society said: "I would think there is a lot of point to the higher education side of this, because many European countries are very worried, as we are, about whether their higher education programmes are on the right lines," he said.

## School-leaver forecasts too low, DES admits

by Olga Wojtas

The drop in the number of school-leavers eligible for higher education by the end of the decade, which has been used to justify the Government's cuts, has been overestimated, according to research being conducted at the Department of Education and Science.

Numbers of teenagers starting A level courses last year continued to rise despite the fact that the peak of the age group had passed, and the signs are that the class distribution of those at earlier stages of schooling will provide considerably greater demand for higher education than recent estimates have allowed.

Dr John Burnett, principal of Edinburgh University, said the figures showed that between a third and an eighth more students than expected would be qualified for university.

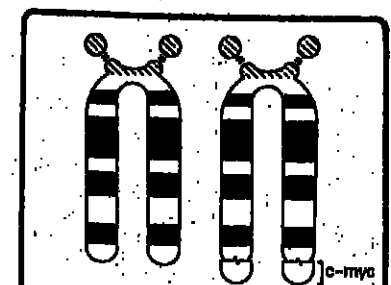
"The DES has looked at the distribution of the birth rate by social class in these classes which traditionally send their children to university. It is a very cautious statement, and very properly makes the point that behaviour patterns change. But if by chance more children come from the non-traditional classes, that would further increase the number of potential candidates."

Dr Burnett added that the paper did not take account of evidence that the number of girls wishing to enter university was still increasing. "I sincerely hope Sir Keith Joseph will take cognisance of his own department's data," he said.

The survey is of England and Wales, but in Scotland the proportion of school-leavers going into higher education has always been 2 per cent higher than south of the border, and in 1980 Dr Burnett and several other Scottish principals warned the Government that the fall in the number of Scottish school-leavers would come some time after that in England and Wales.

More than 3,000 qualified Scots school-leavers will not gain a university place, Dr Burnett predicted. "Sir Keith Joseph might say if more children are fitted to higher education, allowance can be made for them to be absorbed into the public sector, but this does not apply in Scotland where the Scottish Education Department has controlled access to her institutions more precisely," said Dr Burnett.

The DES is planning to publish revised projections of qualified school leavers in April.



Max Perutz on  
the science  
of cancer, 12

Maurice Evans  
on genre, 14

Ali Mazrui on  
a new world  
order, 11

## College classes shrink despite increase in students

by John O'Leary

Average class sizes in the major colleges of higher education dropped last year in spite of substantial increases in student numbers, an annual survey by the Department of Education and Science shows. In polytechnics the move was towards larger groups.

single day, rates, both types of institution as more efficient than in 1981 using a formula which takes account of average student hours.

The extra student numbers resulted in many institutions exceeding target staff:student ratios, leaving only a handful of polytechnics and a larger number of colleges operating with more favourable ratios than recommended.

The largest polytechnic classes were to be found at Sheffield, where non-science subjects excluding art and design had almost 20 students

per class. North London and Birmingham polytechnics also averaged 17 or more students for Group 14 subjects, compared with an average of fewer than 12 students at City of London, Central London, Preston and North East London polytechnics.

In the sciences, North London Polytechnic had by far the largest class sizes, while Plymouth, Bristol, Sheffield, City of London, Liverpool and Coventry (Lanchester) all had averages of more than 15 students per class. Hatfield, North East London, Manchester and Portsmouth all

averaged fewer than 11 students. Comparisons with 1981 are more reliable for the polytechnics since all subjects participated in the survey in both years covered, whereas only 66 colleges were included until 1982.

The committee of the National Advisory Body this week approved proposals to close 15 courses in October. On the advice of the NAB board, a movement studies degree at Nonington College, originally proposed for closure, was granted continued approval and not closed as stated in last week's *THES*.



## Serious business of being funny

Humour is a serious business, worthy of closer attention from academics, according to a group of sociologists who held a meeting on the subject last weekend.

The Sociology of Humour Group attracted only 15 participants to its biennial conference at Aston University, but interest has been expressed by other academics and a second gathering will take place next month at the British Sociology Association annual meeting.

A paper by Mr Chris Powell, of the West Glamorgan Institute of Higher Education, bemoaned the level of resistance both within

academic and outside to "taking of closer attention from academics, thought contrary to common sense who held a meeting on the subject last weekend."

Other contributions included an analysis of Punch cartoons by Mr George Pajot, of Aston University, entitled "Women in cartoons: from scapegoat to she-cat", which argued that cartoons created specific images of female roles according to their social, historical and economic contexts.

The final paper examined British jokes and their equivalents throughout the industrialised world.

## Long search ends for UGC chairman

by Sandra Hempel

Months of rumour and speculation ended this week with the announcement that Sir Peter Swinnerton-Dyer is to become chairman of the University Grants Committee.

Sir Peter, 55, at present Master of St Catherine's College, Cambridge, succeeds Sir Edward Parkes on October 1 and will hold the job for five years. Sir Edward is to be vice chairman of Leeds University.

Educated at Eton and Trinity College, Cambridge, Sir Peter was made a research fellow, fellow and then dean of Trinity between 1950 and 1973. He was vice-chancellor of the university from 1979-81 and has been its professor of mathematics since 1971.

Recently he headed the committee set up by Lord Annan to carry out a major investigation into the future of the University of London. While his specific recommendations including closing Chelsea College and merging others were not taken up, the general drift of the Swinnerton-Dyer report on contraction and merger within London is now being followed.

He also led a research council committee looking at the completion rate of science postgraduates.

Sir Peter is chairman of the steering group for the merger of the New University of Ulster and Ulster Polytechnic and vice chairman of the Advisory Board for the Research Council.

He is described as "an excellent chairman who listens and does not speak until he has something to say, an impressive drafter of documents and the possessor of an original mind untroubled by conventional wisdom".

Sir Peter is in many ways a controversial figure. He caused a storm 10 years ago when he spoke out in favour of keeping single-sex colleges in Cambridge and again more recently when he attacked academic tenure in his valedictory speech as vice chancellor.

On the latter occasion he made national headlines when he criticized aging dons who "appeared less and less often in lecture room and laboratory, repeated the same aging lectures from the same aging notes and drew a full day's pay for half a day's work".

A leading member of the Social Democratic Party, he was responsible for drawing up the higher education content of the party's policy document. He is a member of the SDP's pool of potential candidates but is expected to leave this when he takes up his new appointment.







## Voice for Oxford students?

by David Jobbins

Oxford dons have come a crucial step closer giving students a significant say in the future of the university. The congregation voted 43-39 last week to give two representatives of the student union speaking but not voting rights at the weekly Hebdomadal Council.

But before the vote was taken, vice-chancellor Mr Geoffrey Warnock said the issue should be put to a postal ballot of the congregation's 2,000 members.

The result should be known within three weeks but student leaders feel they made a significant breakthrough by securing the majority vote at the congregation meetings, which was lobbied by up to 300 students.

But a demand for similar representation on the general board of faculties, which determines the allocation of resources between general subject areas, was rejected by 44 votes to 35.

Mr John Grogan, president of the Oxford University Student Association, said: "Since Cambridge admitted students to its decision-making processes, Oxford has been left pretty much on its own. If the postal ballot goes our way it will ensure the student voice is heard at the highest level, because there is some doubt now that it is. Also it will ensure our own submissions are more intelligible and better informed."

Opponents argued that student representation would offer only an illusion of participation in the decision-making process.

But student hopes that agreement could be reached over the use of the Oxford Union premises for a central facility, for example, have been undermined through lack of sufficient support from the junior common rooms which were being asked to underwrite the project.

## No change for pharmacy

by Jon Turney

Science Correspondent

A University of London working party on pharmacy recommends that both the existing schools should continue, provided there is no further drop in student numbers.

However, working party members from the smaller of the two departments, at Chelsea College, submitted a minority report contesting the group's estimate of a viable size for a single class. The point is sensitive because the working party suggests the university consider amalgamating the two schools if the smaller has fewer than 60 students in each year. The Chelsea department has 62 new students this year, including 10 from overseas, a drop from a total of 84 in 1981-82.

The School of Pharmacy, on the other hand, a separate institution of the university, increased its first year class from 90 to 98 this year.

In effect, the working party, chaired by Sir David Smart, a former director of Glaxo plc, has done little to dispel fears aroused when its inquiry was announced. Its original purpose was unclear, as the earlier Biological Sciences had already recommended that both pharmacy departments should remain.

It was suggested that the working party would discuss the amalgamation of the two schools on a vacant site at St George's Hospital in Tooting. This would allow the university to sell the School of Pharmacy's valuable site in Brunswick Square, Bloomsbury. Sir Frank Hartley, a former dean of the school of pharmacy, is chairman of another university committee considering the future use of the Tooting site.

However, student representatives on the pharmacy working party who raised the question of the transfer

were told by the chairman that it was not for discussion.

Pharmacy teachers at Chelsea College feel the figure set by the working party for a single class takes no account of connections with other departments teaching related subjects, which can make it practical to run a pharmacy class much smaller than 60 students.

The final outcome of discussions over the future of pharmacy in London now depends on the result of national negotiations on student numbers in the university and polytechnic sectors. Representatives of Polytechnics' National Advisory Body and University Grants Committee review groups on pharmacy met for the first time last week.

The society would like to see an overall drop of around 100 places available on pharmacy courses nationally, but does not want to see any departments closed.

## Labour alternative to YTS

by John O'Leary

The Youth Training Scheme is likely to prove "mutilated, sterile and unattractive", Mr Frank Dobson, Labour's spokesman on schools, said this week.

He told his constituents that the Government's record on training as evidenced by a juiced-up version of the policy. At heart, the YTS remained the intellectual progeny of minds like those of the Prime Minister and Mr Norman Tebbit, Secretary of State for Employment.

Labour's alternative would be to create "real jobs" so that education and training led to something positive, rather than postponing unemployment. All 16 and 17-year-olds would have the right to an opportunity of a two-year student apprenticeship with high-quality education and training.

A Labour government would also abolish the Young Worker's Scheme and increase allowances for YTS participants to at least £30 a week. At 16-19-year-olds in full-time education would receive educational maintenance awards of £20 a week.

Mr Dobson said that the original proposals for the YTS had more to do with coercion than training, carrying "a pittance" of £15 a week, no supplementary benefit for those who refused to participate and no guarantee of off-the-job education and training. A rebellion by trade unions, careers and youth services, and employers forced important concessions, but big questions remained.

There was no certainty that such client places would be found in industry or that the education service would be able to afford to run the scheme after local authorities. And, Mr Dobson added: "We also must remember that this Government doesn't keep its word."

## Bringing jazz into schools

The Arts Council begins a new jazz in Education scheme next week, considering Regional Arts Association applications to bring jazz musicians into adult education centres, youth clubs and schools.

The scheme is a three-year experiment funded jointly by the council, the regional associations and the Musicians Union. Between two and four projects are likely to be chosen this year, according to the council's music officer, John Muir, as the initial funding is only £10,000.

Project numbers are expected to increase in subsequent years, as earlier ones are taken over by regional associations. They are likely to avoid the redundancy clause taken from employment protection legislation coupled with new safeguards for academic freedom.

They will go before the next collegiate council meeting on March 14 when it will be decided whether to issue a discussion document for circulation throughout the university.

"I am amazed that Professor Quirk is launching yet another scheme to get rid of tenure - this time from every school in the university at a stroke", said Dr Stephenson. "Proposals from a university working party were turned down by the collegiate council last summer and the present elaborate consultation exercise on the CVC proposals is showing a massive rejection of them throughout the university."

"Professor Quirk is supposed to be the servant of the university and yet he is completely out of step with most of his academic colleagues about this."

## Overseas policy 'still flexible'

by John O'Leary

The Government has not shut the door on further changes to its policy on overseas student fees, Lord Belstead, minister of state at the Foreign and Commonwealth Office, told the House of Lords last week.

Winding up a debate which concentrated on the Government's response to proposals contained in last year's report by the Overseas Students Trust, Lord Belstead said the need for a comprehensive and flexible policy was accepted.

"It really is a question of great complexity and many of the issues are for the longer term," he said.

"Our policy must be adaptable to meet changes, and must be sensitive to the requirements not just of countries but of individuals."

Lord Belstead conceded that the Government's hope of sustaining the number of students it sponsored from developing countries despite the introduction of full-cost fees had not proved feasible. But the aid element of the £46m package announced by Mr Francis Pym, the Foreign Secretary, was expected to restore the 1979 level of awards.

He also agreed to consider a suggestion by Lord Greenhill of Harrow that future policy should be guided by informal meetings once or twice a year of interested parties, such as those involved in the preparation of the OST report, with senior ministers at the Foreign and Commonwealth Office.

Other peers were concerned to ensure the primary responsibility for overseas students remained with the FCO. Lord Belstead would not commit himself beyond confirming that the inter-departmental group which drafted the Government's response to the trust would remain in existence.

Although the Government package received a generally warm welcome, Opposition peers remained critical. Baroness David said the assistance for the third world was inadequate and urged the Government to increase the amount of money allotted to help with fees. The new measures would not necessarily increase the net support for overseas students in the coming year, she said, since the existing subsidy was still being phased out.

Although Lord Valzey said that the extent of the problem had been overstated and the main difficulty was in selecting the most deserving students, Lord Beloff repeated his opposition to differential fees. He said he would prefer to see fees for home students raised to full-cost.

Overseas students in England may set up their own association on the model of arrangements already existing in Scotland. A steering committee representing six overseas student organizations has been set up.

## Scots reject differing fees

The Convention of Scottish Local Authorities is poised to reject recommendations that individual institutions should be allowed to set their own fees for overseas students.

The proposal comes from A Policy For Overseas Students published last year by the Overseas Students Trust, and the Scottish Education Department has asked for COSLA's views, as the Department of Education and Science has asked for the views of the University Grants Committee and the Committee of Local Education Authorities.

A COSLA subcommittee is to recommend strongly that its education committee should reject the concept of flexible fees.

One member said: "We just don't see how your local authority finance committees are going to allow individual principals to start mucking fees about. Prima facie it seems quite attractive, but when you consider it, more and more difficulties come up."

However the subcommittee has accepted the OST's criteria for overseas students fees stating that they should be no less than those for British students; they should be at a level precluding resources being diverted from British students to overseas students; and they should be adequate to ensure proper academic provision, "taking full account of any special needs that overseas students may have."

## Quirk quizzed over tenure

London University staff are to question the vice-chancellor, Professor Randolph Quirk, about proposals to weaken academic tenure, reported in THE TIMES last week.

Dr Bill Stephenson, chairman of the London committee of the Association of University Teachers is writing to express the union's "incredulity" at the proposal. "The AUT is particularly annoyed at the timing of the proposals which, it claims, cuts across a large consultation exercise on the tenure plan put forward by the Committee of Vice Chancellors and Principals."

The London proposals were put to a meeting of heads of colleges last week when they were the subject of a heated argument. They include a redundancy clause taken from employment protection legislation coupled with new safeguards for academic freedom.

They will go before the next collegiate council meeting on March 14 when it will be decided whether to issue a discussion document for circulation throughout the university.

"I am amazed that Professor Quirk is launching yet another scheme to get rid of tenure - this time from every school in the university at a stroke", said Dr Stephenson. "Proposals from a university working party were turned down by the collegiate council last summer and the present elaborate consultation exercise on the CVC proposals is showing a massive rejection of them throughout the university."

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## Alvey new technology report taken to task

by Jon Turney

Science Correspondent

The national research effort in advanced computing now taking shape in Britain amounts to a plan for building an information technology Concorde, Professor Frank Land, of the London School of Economics, said this week. But the committee which outlined the programme to the Department of Industry last year did not consider whether this was what people wanted to buy.

In a public lecture delivered on Tuesday, Professor Land, of the Department of Systems Analysis at the LSE, criticized the proposals put forward last year by the Alvey Committee for a government-backed £350m programme in "advanced information technology". Projects planned within the terms set by Alvey already account for most of the new money coming into information technology from the Science and Engineering Research Council and the University Grants Committee. The remainder of the programme is expected to be approved by the Department of Industry later this month.

Professor Land suggested that the four areas singled out by the committee as enabling technologies which must be developed in Britain - software engineering, large-scale circuit integration, the man/machine interface and intelligent knowledge based systems - were selected by technological enthusiasts with too little attention to the market.

The choice of IKTBS in particular assumed that future uses of computing would rely heavily on systems capable of making inferences and complementing human decision-making. But there was little evidence from the marketplace that this con-

tral feature of the Alvey programme would benefit all or even most applications of information technology. Similarly, the definition of man/machine interface research was confined to voice and image input and output devices. This was "disappointing", according to Professor Land. "The deeper implications in terms of skills, job satisfaction and the quality of working life, which are crucial if the technology is to be used successfully, are totally ignored."

He also suggested that communications technology should be included in the programme as a fifth enabling technology, as well as systems analysis and design, to ensure that the new devices produced were tailored to the needs of potential users. The director of the Department of Industry's programme should be someone with "a basic scepticism for the claims of the technological propagandists", he said, and with an understanding of the social issues raised through the spread of new technology.

There should be a parallel programme of research into the user needs of the future, studying such systems as the Inland Revenue to define new information requirements. These and other parts of the programme should be carried out with foreign partners, Professor Land proposed, instead of the almost exclusively national programme outlined by Alvey's committee.

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The late show: Professor Dahrendorf speaks to LSE students on their all-night vigil.

## TUC throws weight behind education unions' campaign

by David Jobbins

TUC leaders have given their powerful support to the campaign for post-school education which culminates next week with a London rally and lobby of Parliament.

The TUC general council issued a statement expressing solidarity with the five trade unions and the National Union of Students which have organized the action in protest at government policies in all sectors of post-school education.

It is believed to be the first time that the Association of University Teachers and the National Association of Teachers in Further and Higher Education have jointly organized a protest on the scale planned.

The general council joined the unions and the NUS in deploring the reduction in student grants and the threat to introduce loans.

TUC general secretary Mr Len Murray said: "We believe more and better post-school education and training opportunities for all ages are vital to the nation's economic recovery. All adults and young people over 16 should have the right to continue their education or training with proper financial support."

Next Wednesday's day of action will begin with a rally at Tower Hill where the star speakers will be Labour leader Mr Michael Foot, union general secretaries Mr Geoffrey Drayton and Mr Rodney Bickerstaffe, and NUS president Mr Neil Stewart.

After a march by way of Fleet Street to Westminster, MPs including Mr Phillip Whitehead, Labour spokesman on higher education, and Mr Alan Beith, Liberal education spokesman, will speak at meetings in the Grand Committee Room. Liberal leader Mr David Steel, Naffes general secretary Mr Peter Dawson, the AUT's incoming general secretary Ms Diana Warwick, and shadow education secretary Mr Neil Kinnock are due to speak at a meeting in the Central Hall.

Organizers have had difficulty in finding a leading Conservative to speak on their platform. Mr Edward Heath, who has previously spoken out against the Government's approach to loans and overseas students, was approached but turned down the invitation.

The action comes just two weeks after what student leaders claimed was an unprecedented wave of protests against government education policies. Support for the NUS demand for 24-hour occupations was firmest in the public sector - with a number of polytechnics including Plymouth and North London planning to extend their occupations.

Few parts of the country escaped some form of action. In London the retiring director of the London School of Economics, Professor Ralf Dahrendorf, spoke to students during an all-night vigil.

Leader, back page

## Pension contributions 'unfair'

A research associate at Heriot-Watt University is fighting compulsory membership of the universities superannuation scheme which the claims does not benefit staff on fixed-term contracts.

Staff on the scheme contribute 6 per cent of their salaries with the employer paying 14 per cent. But academics who do not complete five years' service in British universities or the public sector are not entitled to the employer's contribution.

Dr Mary Thomson is currently on a one-year contract, backed by a three-year grant from the Science and Engineering Research Council, and has been told by Heriot-Watt's staffing committee that the university policy is to require all research associates on contracts of 12 months or more to join the superannuation scheme.

Dr Thomson said: "I wouldn't mind contributing to the scheme if I had a realistic prospect of getting a

decent pension out of it, but I don't and neither does any other contract worker. I'm being required to contribute to something designed for permanent staff."

Dr Thomson's husband, Dr Peter Melling, also a research associate at Heriot-Watt, has been put on an 11-month contract with his head of department's agreement so that he is not obliged to contribute. He was previously on a 12-month contract at Edinburgh University, but opted out of the superannuation scheme there.

Dr G. R. Talbot, assistant general secretary of the Association of University Teachers, said no time was specified for joining the scheme. "If Heriot-Watt regard 12 months as magical, that's up to them," he said.

"It's a very good pension scheme, but there's nothing requiring people to join, and one feels that occasional very exceptional circumstances should be handled with some degree of tact and common sense."

## Full-time academic staff cut by 2 per cent last year

The cut in university funding has resulted in a 2 per cent reduction of full-time academic staff, according to the University Grants Committee. The full-time total fell from 43,017 in 1980-81 to 42,840 in 1981-82.

The fall was particularly marked among recruits on clinical and non-clinical rates of pay, whose numbers declined by 35 per cent and 22 per cent respectively.

Of the 1981-82 total, 5,905, or 14 per cent, were women, and 3,382 (8 per cent) were on clinical rates of pay. Of the 32,755 (76 per cent) full-time staff paid wholly from general university funds, 4,228 (13 per cent) were in professional or equivalent grades; 8,534 (26 per cent) were at reader or senior lecturer level; 19,449 (59 per cent) were lecturers or equivalent; and 344 (2 per cent) were in other grades.

The average age of full-time staff wholly paid from general funds was 40.4 years, with 21 per cent under 35 and 15 per cent aged 55 or over. "The expansion of the university system in the 1960s and early 1970s has resulted in an age distribution of staff significantly different from that required in a steady-state situation in which, for example, about 25 per cent would be expected to be aged 55 or over," the committee says.

"This means that in normal circumstances relatively few would be expected to retire in the next few years and correspondingly few recruited."

The age of staff in different departments varied considerably. The arts and social studies staff tending to be younger than those in engineering, technology and other science departments.

The number of full-time undergraduates in British universities went up by 1 per cent from 251,200 to 253,400, of which 235,000 were home and 18,400 overseas students. The overseas total fell for the second successive year, the UGC says, and represented a drop of 10 per cent from the peak of 20,400 in 1979-80.

The number of postgraduates fell home and 16,200 overseas students. The total of overseas postgraduates was the lowest since the mid-1970s.

While numbers of women undergraduates and postgraduates continued the upward trend, of recent years, there is now some evidence from the new entrant statistics that the percentage of women students is levelling off.

Over 18,800 continuing education courses were run in 1981-82, comprising extra-mural, postgraduate medical and other post-experience courses, involving 443,000 students.

University Statistics 1981-82, Vol 1 - Students and staff. Published on behalf of the UGC by the Universities Statistical Record, PO Box 40, Cheltenham (27.50p).

## Glasgow students rent strike put to bed

An old mattress and a wheelbarrow have ended a six-week rent strike among Glasgow University students. Students in the university's halls of residence, whose fees are the highest in Scotland, were demanding a reduction and rebate.

The university court agreed to waive the late payment surcharge on fees until it had re-examined the hall finances at its meeting last week. However, the halls projected annual loss of £25,000, the UGC said.

The students' representative council said £25,000 of the withheld fees, and £10,000 of an old mattress and a wheelbarrow, full of ten pounds coins.

A report in Glasgow's student newspaper, The Guardian, says a survey of Glasgow students' living conditions showed 27 per cent claimed their parents could not

overdraft or loan, but this rose to almost 49 per cent of fourth-year students.

More than 64 per cent of students said their parents faced having to pay an increased parental contribution this year. Over a fifth said they expected an increase of between £100 and £150 from their parents to make up their grant, while 11 per cent claimed their parents could not

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# Fears over nuclear research

from E. Patrick McQuaid

CAMBRIDGE, MASS. Nuclear weapons-related research is under fire by nearly 300 professors and staff members at one of the nation's five centres for synchrotron radiation experimentation. A petition opposing the development and testing of high speed X-ray detectors at Stanford University in California has been signed by 15 of the 31 teaching staff and 280 of the laboratory's 1,200 research employees.

The X-ray detectors can be used to analyze radiation generated by nuclear explosion but also have applications in the biological sciences. Synchrotron radiation is the electromagnetic radiation including visible light as well as X-rays emitted by high energy electrons fixed on a circular path by radio frequency under the influence of a time-varying magnetic field. A straight moving electron does not radiate while an electron passing through a magnetic field follows a curve, representing acceleration and emitting radiation. A detector could be used, for instance, to study how atoms rearrange themselves when a muscle contracts.

But concerned scientists say their research, even if specifically geared for biological, chemical, or materials experimentation, can be applied to the development of nuclear weaponry. "Our electrons are their electrons," a professor representing the disgruntled teaching staff commented.

Scientists with three other laboratories - Lawrence Livermore, Sandia, and Los Alamos - are seeking \$5m from the department of energy to carry out the research at Stanford's synchrotron radiation laboratory.

In addition, teaching and research staff from seven campuses of the University of California system have requested \$1m in federal funds allocated to the state university for a 50 per cent stake in the experiments. Their role in the overall project would be completely unrelated directly to weapons research, according to proposals.

The Stanford lab, described by proponents of the testing as being conveniently located, has a reputation for "openness and non-involvement in weapons research", which, according to university representatives, has attracted a distinguished cadre of high energy physicists who share those sentiments. Among them is the laboratory's director, Professor Arthur Blumenthal.

University research rules require that a member of the Stanford staff on any project at the synchrotron lab. Should Professor Blumenthal decline to accept that role the fate of the radiation experiments is put into further doubt.

Funding for the proposals has not been included in the budget recommendations submitted by the White House. A panel of scientists not affiliated with Stanford is reviewing the proposals and raising concerns

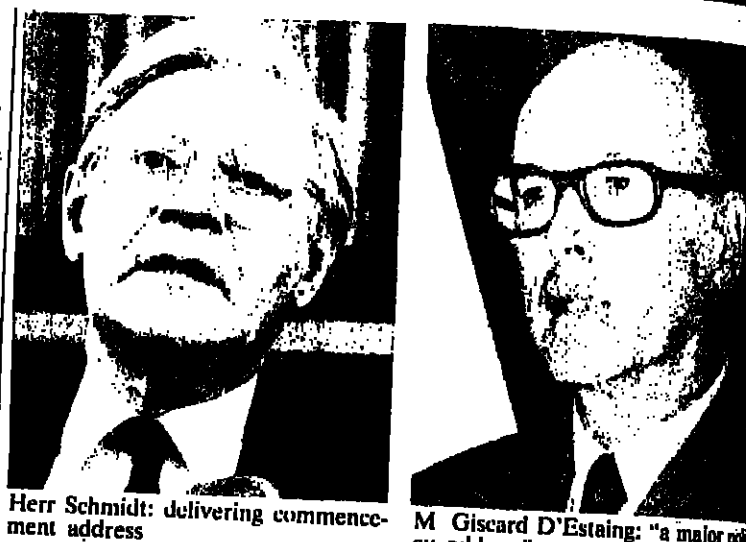
that could take several months before reaching a definite conclusion. Neither that report nor Stanford regulations would reject the experiments solely on their applicability to nuclear weapons research.

The author of the Stanford petition, engineering physicist Mary James, says there is no question that the research is intended for the development of nuclear weapons. It is stated in the proposal submitted to the department of energy by scientists at Lawrence Livermore that "this will directly and immediately benefit weapons programmes".

Eighty per cent of the costs would be covered by "weapons labs", an indication of intent, says Professor James.

On the other side, Lawrence Livermore physicist Lloyd Mulhauf benefits greatly from the instrumentation done for weapons. "I don't see this in any different category than other work done at Stanford," he says. "It makes a lot of sense for the government to fund centres regionally."

Inevitably, many of the Stanford lab's 10,000 yearly visitors ask if bombs are made there. "And the answer is: No, we're not involved in weapons. We try to understand the basic laws of nature," Professor Gregory Lowie might answer. But he continued: "The idea that we could no longer answer that question in a straightforward way was something we felt very uncomfortable with."



Herr Schmidt: delivering commencement address  
M. Giscard d'Estaing: "a major policy address"

## Former heads of state top the bill

Helmut Schmidt, former chancellor of the Federal Republic of Germany, and Valéry Giscard d'Estaing, former president of France, will visit Cambridge, Massachusetts, to deliver the 117th Commencement Address at graduation exercises for the Massachusetts Institute of Technology.

And at Harvard University's Kennedy School of Government, M. Giscard d'Estaing will deliver what is being touted as "a major policy address". He will stay for three days as a visiting fellow with the school's Institute of Politics, participating in a series of seminars and informal talks.

## Personal gain beats the public good

First-year students in American colleges and universities are more interested in personal gain than public welfare. Career plans in business, engineering, and computer programming for outgrowth interests in teaching, scientific research, or social work.

The annual survey of 267,000 new students at 492 institutions by the University of California at Los Angeles and the American Council on education suggests that altruism on campus is at an all-time low and that the prime concern among students is "being very well off financially".

It was described as "very important" by more than two-thirds of those surveyed, with 70 per cent also endorsing being "able to make more money" as a key reason for attending college.

Some 20 years ago nearly a quarter of the first-year student body planned careers as educators while the latest survey pegs student interest in the teaching profession at 4.7 per cent. The most popular career aspiration cited by students today is "business", which weighed in at 20.2 per cent. Only 11.6 per cent of first-year students surveyed in 1966 indicated any interest in such a pursuit.

"Helping others in difficulty" received fewer votes on the scholastic attitude poll than ever before as did "helping to promote racial understanding" and "participating in programmes to clean up the environment", concerns that weighed an entire decade of American students.

The professor who directed the study, Mr. Alexander Astin of the Institute, thinks the results spell difficult days ahead for elementary and secondary education. "Since recent studies of college admissions tests

## Overseas news

# Promises of milk and honey

from Geoff Maslen

MELBOURNE An Australian Labour government would spend an extra \$A55m (£33m) on schools and higher education in the next year, the leader of the opposition Mr Bob Hawke promised in a campaign speech for tomorrow's elections.

He said Labour would have 30,000 more full-time students in secondary schools and tertiary and further education (TAFE) over the next three years, and 25,000 more in universities and colleges of advanced education by 1990.

This would mean as many people taking part in education as in the mid-1970s and would begin to establish a workforce more attuned to the challenges ahead, he said.

Mr Hawke promised an immediate

\$A15m (£9m) for upgrading and expanding the TAFE sector and applying an equal opportunities policy.

Under a Labour government, selected universities and colleges would get money to increase enrolments in approved areas, with special emphasis given to disadvantaged groups and to off-campus students.

The tertiary education allowance would be gradually improved to set the cut-off point for the parental means test at the level of average weekly earnings and make the maximum grant equal to the single adult, unemployment benefit.

Mr Hawke also promised a programme to award 300 research fellowships to scholars holding PhDs. They would receive \$A18,000 (£10,800) a year plus an allowance of \$A5,000 (£3,000) for travel, equipment and administrative costs.

Labour's list of promises stand in stark contrast to the offerings put forward by the Prime Minister, Mr Malcolm Fraser, when he presented the Liberal Party's policies on education.

Mr Fraser said his government would ask the Tertiary Education Commission to investigate whether there were enough places and opportunities available in tertiary education, but he made no promises to provide further funding.

Mature-age allowances for teacher trainees would be introduced over a period of five years, with 100 awards a year.

He would establish a special youth project in re-afforestation and conservation and further projects, which he did not specify, for people not helped enough by present programmes. An extra 10,000 places would come over two years for young men and women on the basis of a one-year voluntary enlistment in the armed services.

## Australia's education system stands in ruins, warns report

Australia's higher education system is facing a crisis caused directly by government policies since 1975, claims a report just released in Melbourne, writes Geoff Maslen.

There has been a shift in the balance between junior and senior staff as a result of lack of opportunities and lack of mobility of senior staff, combined with the tendency of universities and colleges to sack junior financial cuts says the report. The proportion of academics on fixed-term, non-renewable contracts had doubled since 1973.

The report warns that the proportion of school-leavers going on to higher education has fallen by 20 per cent. The fact that student allowances are worth little more than half the amount required to live on the poverty line - must be the cause of some of the drift from high education, but the government's "public devaluation of university and college education can also be seen as influential in the formation of community attitudes," adds the report.

It is particularly critical of the place of women in higher education. Women represent about 17 per cent of all full-time academic staff yet they are distributed mainly towards the junior levels.

show that education majors have much weaker academic skills than students majoring in most other fields appears that we are headed for a crisis not only in the quantity but also in the quality of persons who want to teach in our elementary and secondary schools," he said.

The shift in priorities among first-year students is clearly a national trend. The data suggests that students are more concerned with future finances because they are having to cover more of their educational costs than any class of new students in recent years. The percentage of students receiving federal Pell grants, the grants programme for the neediest students, fell in one year from 26 per cent to 23.2 per cent while the number receiving more than \$2,000 rose from 24 to 29 per cent.

Those receiving federally guaranteed student loans, which carry more stringent eligibility requirements than they did last year, dropped from 26.3 per cent of 20.8 per cent, according to the survey.

A new item in the 1982 survey asked students for their views of increased military spending. A minority, 38.8 per cent, favoured additional defence expenditure. Increased support came in for a national health care plan, legalization of abortion, bussing to achieve racial desegregation in public schools, and greater taxation of the wealthy.

Nearly 60 per cent of the students described their politics as "middle-of-the-road" with a slight upswing in self-labelled liberals and far-leftists. Abolition of the death penalty, legalization of marijuana, and positive action for disadvantaged college applicants however, continued to decline in student support.

## Students tried without a plea

by David Jobbins

The trial of seven Kenyan university students accused of sedition following last year's abortive coup against the government of president Daniel arap Moi has begun in Nairobi.

According to Amnesty International sources, the hearing started without defence lawyers being informed.

Meanwhile, the university, which was closed by the government after the uprising, led by elements in the country's air force and in which students from the university became embroiled, was due to reopen briefly this week merely to complete the 1981-82 academic year. But President Moi has made clear that it will not reopen fully until it is restructured in line with national needs.

Last week 61 of the 68 students due to go on mass trial for sedition were pardoned and instructed to return to their home areas and report regularly to their local chiefs. They had been held since August.

The Government requires them to be of good conduct and behaviour, an official statement said. "They are lucky to receive the pardon. Failure to honour this requirement will be treated with the seriousness it deserves."

Amnesty International has adopted eight prisoners - two lecturers and six students - and is looking into the cases of three others.

The university had been receiving increasingly severe criticism in the months before the coup for acting as a focal point for anti-government activity. A number of academic staff who had been critical of the government were held and ministers tightened their grip over appointments.

## Grassroots plan to match degree areas with jobs

from Jane Marshall

PEKING Changes in China's university enrolment and job assignment systems should help turn out more experts in areas relevant to the country's needs, in the places where they are most needed, and ensure that graduates are given employment suitable for their training.

The reforms include lowering entry requirements for some university applicants and involving employers in graduate work assignment, which is at present exclusively channelled through the centralized State Planning Commission.

Higher education has the formidable task of supplying the huge army of specialists and experts required to help achieve China's plan, announced last year, to quadruple agricultural and industrial output by the turn of the century. The government has already announced its intention of doubling the number of university students by 1990 (THES, December 3, 1982), and in the year beginning next September the state will enrol 348,600 college students - 10 per cent more than in 1982.

China's universities last year provided fewer than half the graduates requested by the country's businesses and government departments; but, even so, imbalance in the division of students between disciplines meant that some fields turned out too many graduates.

According to a report in the official newspaper People's Daily, 50 fields of study, involving 10,000

graduates, supply exceeded demand. These were in limited specialties such as nuclear energy, nuclear physics, engineering physics, space physics, and some fields of metallurgy, agricultural mechanics, oceanography and electronic computers. For many graduates, said the report, there existed no suitable job for their training.

Simultaneously, there were some areas crying out for experts - including political science, bio-engineering and agricultural engineering - but there were no courses for these specialties in China. Other disciplines trained too few graduates.

The changes in university enrolment and job assignment procedures were recently outlined by the Ministry of Education.

Priority in enrolment will go to applicants from rural areas, and others willing to work in the countryside, studying agriculture, forestry, medicine and teaching. From this year, a lower standard will be set for university entrance examination marks for these students.

Besides the state's enrolment quota, colleges will be allowed to sign training contracts directly with employers. The employers will pay for the training of these students.

Four Chinese institutes, including Qinghua University in Peking, the country's leading science university, have experimentally established a contract system between themselves and prospective employers. The idea is that they should directly discuss supply and demand.

## Germans protest for peace

West German university lecturers and intellectuals who recently launched a petition on behalf of conscientious objectors arrested in Jena have been duped according to the official East German news agency ADN.

The agency says they have fallen victim to a misinformation campaign intended to cause uncertainty among intellectuals in the peace movement during the run-up to the West German elections on March 6. "Not a single citizen, critical artist or worker, let alone young person, has been arrested for supporting peace," said ADN.

The alleged arrests which sparked off the protest were of three young people - artist Frank Rupp, songwriter Peter Keller, and car mechanic Edgar Hillmann - all from Jena. All three had taken part in an attempted demonstration on Christmas Eve, which took the form of a minute's silence in front of the Friedrichsberg (peace church) followed by a march to the market square.

The Jena demonstration is the latest manifestation of the disarmament and anti-war movement in the GDR among young people. Pararmilitary training in schools and universities is a very important part of the curriculum and any protest meets with severe official disapproval.

A badge has been circulating with the motto *Hilfsdienst statt Wehrdienst* (ready to help instead of defend) reflecting the growing demand by young people to be allowed the option of social service instead of armed service and compulsory military training in schools and colleges. A good pass in gun handling is still needed for one's school leaving certificate and university entrance.

## Finland 'too ambitious'

from Donald Fields

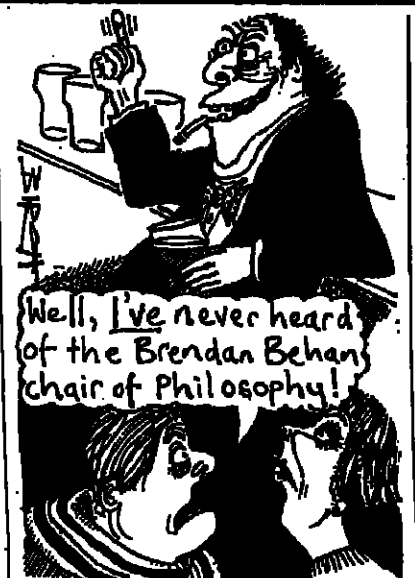
HELSINKI In a generally favourable report, the Organization for Economic Cooperation and Development has expressed anxiety about what it calls Finland's "formidably ambitious target" of making post-secondary education universal. The 24-country organization, to which Finland was admitted in 1969, urges the need to correct the concept of a "first-end" education system covering specific age groups with a "continuing and recurrent" perspective geared to specific objectives.

The conclusions are included in a 120-page review of Finnish education policies written by four examiners chaired by Professor A. H. Halsey of Oxford University. About a third of the exhaustive findings are devoted to higher and adult education.

The examiners describe remaining social inequalities as a "disappointment", as late as 1980, upper-middle class children were 34 times more likely to enter higher education than those from the working class.

The OECD notes a mixed performance in the policy of democratizing access to Finnish universities, which expanded their enrolment from 42,000 in 1968 to 80,000 in 1980 and their staff from 2,400 to 5,600 in the same period. The spawning of new seats of learning around the country, now completed, is reducing the concentration of student places in the old intellectual cradles of Helsinki and Turku from 94 per cent in the early 1960s to a projected 55-60 per cent in 1986.

Sexual equality appears to have been achieved in terms of the share of women - 49.2 per cent - among students in higher education. "The examiners describe remaining social inequalities as a 'disappointment', as late as 1980, upper-middle class children were 34 times more likely to enter higher education than those from the working class.



## Trinity staff demand rise

from John Walshe

DUBLIN The first official strike in Trinity College Dublin's 400-year history has set a poster for the government. For it also represents the first serious attempt to breach the clampdown on special pay rises imposed on the public sector last year.

The 350 striking security, cleaning and maintenance staff are demanding a £7.50 per week pay rise to bring them into line with Dublin local authority workers.

But the government fears that if the Trinity staff win their case the way will be open for other groups of workers to do likewise. As most of its funds come from the state, the college cannot make peace with the strikers.

In the meantime it is trying to keep as many lectures going as possible, while many academics and administrative staff are volunteering to do work normally done by the strikers. One renewed emergency fellow was sent to the college to help with the cobblestoned campus. But, another academic - philosophy lecturer Peter Mew - felt that on principle he could not pass the pickets and decided instead to hold court in a local hotel.

## Poland cuts 50 courses

Poland is to set up a "general" university, for workers who want to "broaden their intellectual horizons and acquire humanist knowledge at university level". At the same time, the intake of students to more than 50 full-time undergraduate courses will be halted next year, as part of a plan to tailor university education more closely to the needs of the economy. Enrolment in most other full-time courses will be cut at the same time.

In recent years some young graduates, particularly in the humanities, have had considerable difficulty in finding jobs. But few Polish students and academics believe that the cuts are motivated entirely by economic considerations - particularly as the courses to be "temporarily" axed, include three at colleges of economics and 29 in teacher training colleges - sectors in which there is no lack of jobs.

The decision about the cuts was taken at a meeting of university rectors and first secretaries of university party organizations, and was announced on the second anniversary of the establishment of the now-banned independent students association (NSW).

This anniversary passed off relatively peacefully, with only one major demonstration being recorded - a protest march in Krakow. Official sources said no violence was used to disperse the crowd.

A few days later, however, Archbishop Jozef Glemp, issued a special appeal to students to remain calm, in case demonstrations should imperil the Pope's planned visit in June.

The rise of the NZS marked the fall of the then minister of science, higher education, and technology, Dr Janusz Gorski, who was unable to put, through negotiations with the striking Lodz students, which led to the founding of NZS. Since then, Dr Gorski has remained in the background. It now appears that he has become a leading figure in the establishment of the proposed general university.

## College president dies skiing

The president of Amherst College died suddenly last week while on a skiing holiday in Massachusetts near the campus. Mr. Julian G. Giblin, who distinguished himself in polymer physics while with the teaching staff at Brown University for 20 years, had been president of the four-year, liberal arts college since 1979.

Under his stewardship the formerly all-male college became co-educational, a move initiated some eight years earlier by his predecessor. He is accredited with having strengthened Amherst's science and mathematics curriculum.

## Lecturer charged

A lecturer in romance language at Tufts University, near Boston, has been charged with rape, attempted extortion, threatening injury, and lying on a felony report. Mr. Alexander V. Gascon, a French national born in Romania, is being held in custody. He had been convicted and awaiting appeal on the charge of rape just a year ago.

According to the district attorney's office, Mr. Gascon had managed to persuade his victim to accuse Harvard law professor Detlev Vogt of the crime in order to blackmail him. The woman, who had worked for professor Vogt, was sacked from her job, after which she recanted and accused Mr. Gascon.

## Harassment survey

Harvard University has agreed to fund a survey on sexual harassment initiated by the Radcliffe Union of Students. Organizers of the effort to study the extent and potential remedies of sexual harassment believe it will be the most extensive study ever undertaken by a university.

Two highly publicized cases, each involving a male Harvard lecturer and a female student, have called attention to the issue. The alleged rapes of the two students by their lecturers have been handled by the university's internal disciplinary system, but the Radcliffe Union of Students is demanding a more thorough investigation.

The University of Connecticut has decided not to retract its prestigious award prior to the poet Derek Walcott's Boston university lecturer. Walcott, who was reprimanded by the university's internal disciplinary system, has been accused of sexual harassment of a student. The university has agreed to fund a survey on sexual harassment initiated by the Radcliffe Union of Students.

## State after state stricken by teacher disputes

from a Special Correspondent

WASHINGTON The longest teachers' strike in the history of the United States ended in Pennsylvania after 82 days. Teachers agreed to a new contract with the local school board but their appeals against court imposed fines of \$3,000 each.

In Montana about 30 principals and school administrators went on strike for four days over a seniority and pension clause in their new contract. Eventually they accepted the school board's terms.

In Quebec 90,000 teachers are still holding out in a strike which originally included 200,000 public employees. An estimated 1,000,000 students have been left idle by the strike, which is in protest at legislation passed last month pushing civil service wages back 19.45 per cent for the first three months of this year and maintaining level funding through 1985.

In Canton, Ohio, classes are open despite a strike by 120 teachers now in their fourth week and in New York City 1,000 teacher layoffs were averted. After the city and the state reached a compromise allocating an additional \$9m for the school district in state funds.

In West Virginia, a 4 per cent education spending cut will go through despite efforts by the state teachers' association to overturn the governor's order in court. Meanwhile, in Illinois a similar suit was successful, blocking that state's plans to cut \$159m in education spending.

## Money muddles blamed for fall in black student numbers

from Cathy Pascuilli

WASHINGTON Dr. Samuel Myers, president of the National Association for Equal Opportunity in Higher Education, blamed confusion over the availability of financial aid for a slight decline in the number of black colleges and universities during the past year.

In many cases, the federal government did not inform various universities of the exact amount of financial aid they would receive and in turn, university counsellors were unable to relay accurate information to their students, Myers explained.

The 102 historically black colleges and universities lost 1,000 students last year, Myers said. The decline was particularly sharp in the South, where the loss of students was 1,500.

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# The grieving of Liverpool

Felicity Jones reports on a city's fight against time to make order out of its higher education chaos

The heat is on in Liverpool where for three years indecision and poor leadership have bedevilled plans to come up with a coherent, rational approach to higher education. Time is running out because if an agreed plan is not ready by the end of the month, the fear is that the National Advisory Body will come along and impose a solution.

The articles and instruments are being drawn up for the new all-encompassing institution to be called the City of Liverpool polytechnic to incorporate the City of Liverpool's College of Higher Education (COLCHE) along the lines of those already decided for the merger between the polytechnic and the I. M. Marsh and F. L. Calder colleges. Dr Gerald Bulmer, rector of Liverpool Polytechnic, has been designated rector of the new polytechnic and on paper events may look assuredly in hand. But behind the scenes lies a desolate trail of botched, makeshift actions, often politically motivated or arising from partisan whims, which belie any purposeful strategy.

There were three immediate factors which forced the council's hand, making some fairly drastic measures inevitable. First, there was the swelling reduction in cash from the pool allocation so that it was "capped" in 1980, the council was £1.5m short.

For the first year this was covered by a rate rise but the following year a further substantial shortfall led the council to go to the colleges for savings, some of which were made. When it came to the 1982 allocation, a £3.1m shortfall had to be carried wholly this time by the colleges, as the council was not prepared to contribute any more from the rates. Heavy government penalty would have meant that a £1m grant to the polytechnic would have cost the council £2.5m.

Second, the council's decision to merge COLCHE with the I. M. Marsh and F. L. Calder colleges had to be made. The catch was, however, that any savings made were once-off, non-repeatable, which meant that any further savings would involve more drastic measures.

Over and above this critical financial burden, there was the NAB's "hypothetical" planning exercise to reduce expenditure by 10 per cent over two years from September 1984. From the start, this appeared to be headed by the authority and college heads to go ahead in making decisions to make cuts in anticipation of any policy decisions which might be made at a national level.

Third, there were the Department of Education's proposals for initial teacher training which at first were to mean a complete closure of

courses at COLCHE and a reduction of intake into physical education at I. M. Marsh. But after representations, certain primary BED and craft BED places were reinstated in the enlarged polytechnic, although in fact they will have to run at COLCHE since they come under a University of Lancaster validating programme.

Admittedly, these factors would provide any local authority with a task of Herculean proportions, in trying to pick its way through political and college loyalties to arrive at the best plan or compromise. But what has emerged is anything but that. In fact any disinterested observer could not fail to perceive the resulting chaos. The lack of any clear political direction from the Liberal local authority which relies on Conservative support and betrays general disinterest in the city's higher education, opened the door to a vacuum in which the strong have won the arguments.

The treatment of COLCHE suggests that plain political wheeler-dealing has got in the way of commonsense. Councillors who live adjacent to I. M. Marsh and F. L. Calder Colleges in the middle-class south of the city favour their retention of courses even though they are only half full and are among the most expensive colleges in unit-cost terms in the country.

Another puzzling question is why the DES did not from the beginning propose the merger of colleges in Liverpool, as it did in Manchester. A request from the Secretary of State for Education did arrive eventually intimating he was in favour in time for the policy and finance committee of the council, not the education committee, but only with the casting vote of the chairman, Sir Trevor Jones, the council's powerful leader.

The catalogue of U-turns and decisions made and unmade at the polytechnic provide an abject case study of Liverpool's crass decision-making processes. In six months the rectorate has presented 12 different proposals for staff losses, ranging from 218 to 57 staff to go since July last year. There have been six separate "hit lists" of courses over the same short period which has led bewildered lecturers to calculate that 40 per cent of all courses have been under threat at some time or other (see table).

Course closures have been relentlessly pursued in the face of cogent arguments that savings will not be made by this means. The loss from fee income and the required one year's notice for redundancies would counteract any benefit. But more than that, the hit lists appear to have been drawn up with no obvious rationale behind them. Any attempts to analyse the polytechnic's internal finances in a rigorous fashion have been ignored.

Early last year Dr Richard Highcock, then deputy director who has since left, produced tables of estimated departmental costs and income which showed that only seven departments showed a surplus. These included advanced nursing, town and country planning and law which are now on the latest list of course closures. These estimates have not entered into any decisions.

The academic board should have been the body, if any, to make these difficult decisions accepting that they had to be made at all. But it is weak, perhaps because it is composed of the academic heads of departments who vie with each other for their departmental interests. This led to one farcical situation last October when a courses committee was set up to put courses in order of priority and the head of the languages department, who was on polytechnic business abroad, returned to find that in his absence the BA in languages had been listed for the axe.

In the event, the academic board refused to ratify the list but by this time the local authority was getting desperate. An embargo on student recruitment had been imposed since July so a steering committee was set up to wield the knife. It was composed of two Liberal and two Conservative councillors, governors from outside the polytechnic, the rectorate and faculty chairman, and led by the Conservative Councillor Christopher Hallows, the chairman of the governors.

Once again, though, particular academic interests muddled the waters because faculty chairmen are not deemed to be heads of departments, which may explain why science subjects alone have remained immune from any threats.

The lack of academic policy is well recognized outside the polytechnic. The Council for National Academic Awards wrote to Dr Bulmer after an institutional review and expressed its concern over the "serious and fundamental problems" which diminished the CNA's confidence in the polytechnic's ability to sustain what progress had been made since the previous visit in 1976.

By November there were two ad hoc committees at work: the steering committee and the city council's higher education working party but neither could agree. Dr Bulmer off his own bat announced yet another "hit list" of courses which caused another furor politically in the city. At the same time the whole debate on Liverpool's educational future was taken out of the hands of the education committee and into those of the policy and finance committee which agreed the merger.

It had become clear to polytechnic staff by now that more criteria were at work in decisions about courses than had been publicly acknowledged. Dr Bulmer told the staff of the faculties of construction and art on February 10 that the "steering committee" had left for colleagues had been thrown out because it was "subjective". He told them: "I believe it was looking back at what the polytechnic was. What we should do is look towards the future - we need to identify those courses to be saved for the 1990s."

Dr Bulmer told town planning students that his personal vision for the 1990s was for a multi-technic based on science and technology, something along the lines of the University of Lancaster Institute of Science and Technology. The Institute of Science



Sir Trevor Jones: casting vote.

sciences and librarianship did not fit too easily into that blueprint.

The entire argument for the need for drastic surgery, quite apart from any ulterior motives about the future role of the polytechnic, was rejected by one academic member of the steering committee who wrote a minority report. Mr David Kernode argued that confusion had arisen between those cuts required to avoid support from the rates and those which might be necessary if the NAB imposed its 10 per cent cut. In his opinion there was no need for either course closures or "starvation" to meet the 1983/4 savings.

He also pointed out that no reference had been made to student demand or cost-effectiveness in decisions, both criteria identified by the NAB, and said that low weighting had been given to local and regional needs.

Meanwhile, the city council's higher education working party, having met representatives from threatened departments, decided to refer all decisions back to the governing body although in fact it was the steering committee not the governors which was making the crucial decisions.

The council asked COLCHE and the polytechnic to examine how they could together eliminate overlap in history, geography and sociology between the two institutions. The institutions were authorized to lift the embargo on student recruitment as they saw fit and to make reductions in staffing if necessary, by the operation of statutory redundancy or other schemes.

Other savings through the use of contract cleaners and employment of catering staff on a seasonal basis were also encouraged by the council's working group which called for an early report on the future use of the polytechnic's 18 sites. The two Labour councillors, out of the six members, dissented from the policy which in effect put the ball right back where it had started.

Only this time certain procedures were side-stepped. Without reference to the governors, Dr Bulmer and Councillor Hallows went ahead and lifted the ban on student recruitment but only on 31 selected courses. The embargo was retained on nine "vulnerable" courses and out of these five were added. These 14 courses are still unable to recruit for next year, which at this stage comes very close to saying that they are finished.

The latest event in this unhappy saga was the admission at the last academic board meeting on February 16 that fee incomes had been underestimated by £200,000 and staff costs had been overestimated by £250,000. No mention was made of the threatened courses. So could it be that after all that blood sweat and tears someone has discovered courses do not have the answer, there is little comfort in this, this may reflect on what the future might hold in store for the new city polytechnic. The CNA's criticism of lack of academic leadership still stands, there is no plan for the future of Liverpool's higher education even now, nor has a shadow governing body been set up to steer it. Surely Liverpool, with all its particular special problems, deserves better than this.

## Keeping an Open mind...

Let there be no doubt about it, the university must move and experiment in its methodology especially; and it has the will to take that move, says the rector of Spain's Open University, which this year celebrates its 10th anniversary.

The Universidad Nacional a Distancia (UNED) was set up in 1973, in under a year. Since then it has registered 60,000 students, and has four faculties, more than 400 subjects of study, and 2 centres. The students come from a wide social range: teachers, civil servants, businessmen, housewives, young people, country folk, the unemployed.

On the debit side, between 85 and 90 per cent of students never finish the course. The average graduate takes five years to finish, and in a first decade there have been 3,000 (UNED) degrees granted. The rector, international lawyer Professor Elia Perez Vera, who has been in the job just three months, is quick to acknowledge the university's failings.

In an interview in the national newspaper *El País*, she reflected on this failure. She said that the students enrolled without a clear idea of what the work entailed: only when they received their first study pack did they find out. But this high drop-out rate is included with the figures of those who give up after one or two years or more, which she says is the real failure rate.

"It's often forgotten that the UNED is the only institutional body for preparation for access to university for the over-25s," Professor Perez Vera said. "We usually register 12,000 students a year, but only 10,000 actually start university courses, and that's equivalent to a total registration in one year of a traditional university. Logically many of these students won't reach their goal, but their failure rate boosts up the total number of drop-outs."

Critics point to two key weaknesses in the university: teaching materials and assessment. When the UNED began it took many features of traditional Spanish university teaching.

Students who attend one of the UNED's centres can discuss their problems with tutors. Here, too, tradition prevails. Lacking sufficient training in tutoring, the staff find it easier to give the traditional classes which the students demand. The UNED does not have an overall teaching programme through which it coordinates the work of its separate centres. Critics say that the tutor therefore becomes an old-fashioned private coach preparing the student for a public examination which undermines the Open University ideal.

Of the students who graduate, 60 per cent are men, although nearly as many women as men enter. In Spain's traditional universities, on the same degree courses, women make up almost 50 per cent of the graduates.

The most popular subjects with graduates have been law and economics. So far, no one has graduated in industrial engineering, although the course has for its first batch of graduates. The UNED has been used to support their existing qualifications.

The new rector intends to concentrate on enhancing the distinctive qualities of a distance-learning university, with its own teaching and assessment styles. Her first priority is to exploit open access to its full potential, and enable students to study specific subjects without having to follow a full course or degree.

Professor Perez Vera said: "In the university it is possible that we have the knowledge and the ability to turn upside down the apparently unchangeable order of traditional education, and to start where the others finish - that is, to go from specialization and the practical, to the general. That should be our essential objective."

Sarah Jane Evans

## Worlds apart

Some crises in the Third World are more conspicuous than others. The Arab world is reeling from two conspicuous developments of 1982 - the oil glut in the world economy and the blood glut in Lebanon.

Latin America has been stunned by the rising international indebtedness of Mexico, Brazil, Argentina and elsewhere, as well as by the lessons of the Falklands War between Argentina and Britain.

Africa has suffered from declining agricultural output and persistent political instability. Asia has its own variety of tensions - ranging from the crisis in Afghanistan to the war in Kampuchea.

Voices of desperation are beginning to be heard in the Third World. If donors and lending institutions have learned to organize for joint action, why shouldn't the indebted countries of the world convene to discuss joint bankruptcy? Should they hold the West's banking system to ransom in pursuit of a new system of financial and economic order? There is a surplus of oil in the world economy. Journalists have appropriately christened it "the oil glut." It threatens the very existence of the only powerful international institution that the Third World has produced - the Organization of Petroleum Exporting Countries.

There is also a "surplus" of mouths to feed in much of the Third World. In Africa especially population growth is continuing relentlessly, while food production is declining. International food organizations have begun to worry about the possible outbreak of serious political unrest in the Third World in the wake of food deficiencies and the threat of large-scale starvation.

Many Third World countries continue to produce what they do not directly consume - from copper to cotton. They also continue to consume what they do not wholly produce - from rice and iron to basic equipment. The commodities they do produce for export, such as copper are as vulnerable as ever to international price fluctuations.

There is a school of thought which believes that Western countries will only be able to help the Third World when Western economies are internally strong. In reality the North would only make concessions when Northern economies are externally vulnerable.

There have been many periods when Western economies have been internally strong. They were strong in that sense in most of the 1950s and 1960s. But there was little evidence of a readiness to engage in the kind of global reforms which would ameliorate the lot of Third World

In December *The THES* published an article by Willy Brandt in which he claimed that the economic and social divide between the industrial North and the underdeveloped South had widened rather than narrowed since the publication of the first Brandt Commission report in the mid-1970s. In a month which sees the publication of a new commission report - *Common Crisis* - which gives little room for optimism, ALI A. MAZRUI, an expert on African affairs, looks at the continuing dilemmas of overseas aid.

And so OPEC's golden decade was lost and wasted. Instead of using the oil cartel as a lever for changing the world system as a whole, the OPEC leadership seemed interested only in altering the price structure of signs of readiness to link oil prices to issues of global reform, in wider of Henry Kissinger's effort to separate OPEC sheep from poorer Third World goats. The oil cartel temporarily succeeded in launching the North-South dialogue with an agenda which encompassed not only oil prices and supplies but also issues of commodity stabilization, development, and monetary reforms.

But OPEC was not inclined to follow through and exert pressure for fundamental change. The oil producers did support the moves in the United Nations towards defining new targets for global economic reform. Indeed, it was Algeria, a member of OPEC, which inaugurated in a special 1974 session of the General Assembly the concept of a "new international economic order". OPEC countries also took the lead in formulating the General Assembly's 1974 charter of economic rights and duties.

But while OPEC countries were indeed part of the rhetoric for global reform, they never became part of the action to bring about the reforms. They managed to surpass OPEC countries (of the West and Japan) in percentage of gross national product devoted to foreign aid. The Arab members of

North Beach was the place back in the old days, and some cottages across the bay in Berkeley. But the literary scene there has been bustling and bounding picket fences, with perhaps the greatest range of poetic commitments in the United States, and certainly the most literary activity outside of New York.

In the 1950s Lawrence Ferlinghetti's City Lights Books had begun to legitimize the Beat poets, publishing their first books as well as European writers. To be sure, City Lights is still active, as are some of the local Beat poets, like Bob Kaufman and Jack Micheline; one of the Beats' main magazines, *Beatitude*, has even been revived in recent years. But in the 1970s and 1980s, aided by federal and state grants, hundreds of small presses and literary magazines have given other writers opportunities to publish as well.

Not much has ever unified these various presses. But in the 1970s some came to see the unity in their diversity. As such, the Before Columbus Foundation was founded in 1976, a national organization devoted to the promotion of a multicultural diversity in American letters. Its functions as a distributor for many member presses, and publishes reading series, and has organized catalogues, anthologies of work from the presses. Moreover, in 1978, the foundation established the American Book Awards - two years before the commercially sanctioned Association of American Publishers announced its version with the same title (formerly the National Book Award) - to recognize works of quality writing from any American publisher; its third annual awards ceremony

many last May featured a Lifetime Achievement Award to novelist Chester Himes.

Some of the foundation's most ongoing board members have continued to be poets in their own right. Novelist-poet Ishmael Reed has in the past decade formed a multicultural diversity in American letters. Its functions as a distributor for many member presses, and publishes reading series, and has organized catalogues, anthologies of work from the presses. Moreover, in 1978, the foundation established the American Book Awards - two years before the commercially sanctioned Association of American Publishers announced its version with the same title (formerly the National Book Award) - to recognize works of quality writing from any American publisher; its third annual awards ceremony

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Gaddafi: brilliant, not wise



Muhammad: unfulfilled promise

changing the global system. Unfortunately, Riyadh was a capital of piety rather than vision, a custodian of the holy places of Islam rather than a genuine guardian of Third World interests.

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OPEC even used oil as a political weapon during the 1973 Arab-Israeli war. But OPEC countries never seriously used oil as a weapon to induce global economic reform.

And now the golden decade of 1973-83 is lost.

OPEC's escalation of oil prices in 1973 and 1979 was the first serious crisis of international capitalism to have been ignited by the Third World. In past crises in the last hundred years, the Third World often suffered as a consequence of initiatives taken by the North; imperial rivalries and scrambles were launched by the North; trade wars were often ignited by the north; and the high stakes of Wall Street and other major stock-exchanges have, by default, been Northern institutions.

The collapse of Wall Street in 1929 and the ensuing Great Depression were catastrophes of the North which engulfed the rest of the world. If the recession of the 1970s has its origins in decisions made by Third World countries, a shift in global power has begun to take place, for betwixt North and South are, to some extent, mutually vulnerable to each other's decisions. Interdependence between North and South is moving from being of the kind which exists between a rider and his horse to one which ought to exist between husband and wife. Neither form of interdependence is perfectly egalitarian, but OPEC has helped to raise the status of the South from that of a horse to that of a conventional exploiters wife. Major economic decisions by either spouse could seriously affect the well-being of both, but the

## The Beat goes on...

Jason Weiss appraises the work of today's writers following in Jack Kerouac's footsteps



Kerouac: father of a Beat generation

ing: David Meltzer, who publishes Tree Books and a literary journal, *Tree*, devoted to study of the Cabala and its application in contemporary arts.

Other publishers around San Francisco reflect a multicultural aesthetic on the basis of their own tastes and intuition. Considering the different kinds of writing in the books and anthologies of Stephen Vincent's *Monro's Press* it might be difficult to imagine the same people buying and the books. Thus, he widens *Monro's Press* to include a wide range of writing on language and performance, edited by Vincent and poet and scholar of the avant-garde Ellen Zwarg, herself a performance poet and scholar of the avant-garde.

Some press and foreign avant-garde. The most unaligned of these is the eclectic magazine *Unlikely*, edited by John McBride and City, published by the publisher of the *Unlikely* Press. They feature English, French and especially Italian avant-garde poets, mixed with colloquial and experimental regional poets.

The most optimistic movement of avant-gardists is the very theoretical group of "language" poets, allied to contemporary New York and elsewhere. Theirs is a writing formed

and filled by the very matter of language, from Lyn Hejinian and Harriet Walter's *Poetics Journal*. They are ideologically much in evidence these days at San Francisco area performances.

"Endemic to small presses is a usual lack of funds and an overload of work, such that many appear irregularly when they do persist in hanging on. Some seem, rather, as Laura almost regularly, such as Laura Chester and Geoff Young's modest but astute press *Tree Figures*.

But the greatest air being made in the last few years seems to be from the phenomenally endowed North Point Press, which has issued a rapid succession of beautifully made books, concerning the American avant-garde and literature, by such writers as essayist Guy Davenport, and poet Robert Sund, William Brook and Michael Palmer.

There have also been certain glacial voices to rally poets. The late Kenneth Rexroth, perhaps the area's most eminent and long-lived poet, has been most often an advocate of interest in a "prime" advocate of interest in the "Far East". For the past 40 years, the poet Josephine Miles has welcomed young writers as well as poets to her home in Berkeley; now a retired university professor of English, she has been a constant bridge between academic poets and those who sought a more independent course. Some of them in turn have wielded their own large influence, such as Jack Spicer, whose legacy still flourishes nearly 20 years after his death, and Robert Duncan.

Then there's the creative writing programmes. At Poetry Centre has University, offering regular readings for sponsored regular readings for nearly 25 years, containing an invaluable audio and video archive of American and foreign writers. The most recent programme comes from the New College in San Francisco, with its College in poetry, and a faculty that includes Duncan, on visionary and romantic forces in poetry, Diana Prima on perspectives of magic, and Meltzer on Cabalistic writings.

Poets are active in the grassroots too. The San Francisco State features a thorough poetry-in-the-schools programme, engineered last year by John Oliver Simon, with its militant anthologies and readings young students work. Concurrently, poets like Max Schwartz have pioneered writing workshops at Quentina and Folsom.

Above all, there are the readings. *Poetry Flash*, the monthly calendar and review of local literary events, has swollen to 10 pages. It is brown, yellow, red, white, linguistic, feminist, communal, political, a garde, a magist, surreal, it's there, and more. Even the walks are being written. Or maybe they are.

The author is an American poet, a translator living and working in Paris.

The principle of mutual vulnerability should be institutionalized and consolidated. Hence the need for a solidarity of the indebted for the remainder of this century, regardless of whether OPEC survives or not. At the moment the governments do have mechanisms of joint consultations. But the borrowers tend to engage in separate country-by-country bilateral negotiations with the jointly briefed lenders.

Being in debt is normally a condition of vulnerability on the part of the borrower. But if the debtor declares bankruptcy, he could shift vulnerability to the creditor, or may share it with him. At the global level this could imperil the international banking system itself.

A Third World country like Mexico heavily in debt is indeed in a state of weak dependency. But the possibility of not being able to pay could be a source of power for Mexico, creating an urgent readiness on the part of the creditors to come to Mexico's rescue. There is a level of indebted dependency beyond which dependency becomes a basis of power and not merely a measure of weakness.

Those "in the red" need not themselves be "Red" - the solidarity of the indebted need not include Communist countries like Poland and Romania. The solidarity of borrowers should in fact be a Third World movement and should be seen in the context of East-West relations, not in the context of East-West relations. To include Poland and Romania in the movement of the indebted would be to blur the distinction between North-South concerns on one side and East-West concerns, on the other.

The solidarity of the indebted already has a genesis. The Group of 77 of the less developed countries has repeatedly called for such concessions from the North as debt moratoriums. And advocates of the new international economic order have shown sensitivity to the heavy burdens of debt and balance of payments deficit in the Third World. But in the final analysis the goal is not to pull down the temple of capitalism, but to explore areas of genuine interdependence between North and South, and to use that interdependence as a basis for global reforms.

The author is professor in the University of Michigan's centre for Afro-American and African studies and research professor at the University of Jos, Nigeria.

Common Crisis, Pan Books, £1.95.



# Cancer: causes, cures and the molecular

Some years ago the late Sir Ernest Chain, co-discoverer of penicillin and Nobel Laureate in Physiology and Medicine, campaigned that the Medical Research Council's Laboratory of Molecular Biology be either shut down or transferred to the Science Research Council, because molecular biology was a non-subject and irrelevant to medicine. His views were not untypical and could be countered only by holding out hopes for jam tomorrow. Now at last the long promised advances in medicine have actually arrived. Genetic manipulation, the deciphering of genes and the invention of monoclonal antibodies have opened the way to the diagnosis of inherited diseases in unborn babies and have made it possible to track down the origins of certain human cancers.

To explain these spectacular advances I must first introduce the chief organs of the living cell: genes and proteins. Nearly all genes consist of long chains of DNA (deoxyribonucleic acid). They carry the genetic information in the form of four different chemical symbols called nucleotides and referred to as A, T, G and C. Each word of the genetic code consists of a combination of three such symbols. Now four different symbols can be combined to form triplets in 64 different ways, so the genetic code contains 64 words. The genetic code contains 64 words: ATC, GCA, TAG and so on. A gene may consist of anything from a dozen to several thousand words, all arranged in a linear sequence along the DNA chain. A human chromosome may contain of the order of 10 million words or several thousand genes. Since there are 46 pairs of chromosomes in a human cell, its total genetic information amounts to about 5,000 million words, equivalent to a library of some 10,000 volumes. Genes are chemically inert and have only one function: to determine the structure and function of the tools, engines and building bricks of the living cells.

They consist of long chains of amino acids of which there are exactly 20 different kinds, called glycine, valine, serine, arginine, etc. They would make quite pretty girls' names. Some protein chains, such as those that make up certain hormones, contain only a few amino acids and others, for example those in the fibres of muscle and tendon, contain several thousand, but in all proteins the different amino acids are arranged in a definite sequence. That sequence is determined by the genes. Each of the amino acids is coded for by one or several of the nucleotide triplets of DNA, so that the linear order of triplets along the chain of DNA specifies the linear order of amino acids along the protein chain. A misprint in the DNA is therefore liable to cause a wrong amino acid to be inserted in the protein chain. Such misprints occur as a result of mutations.

One more point must be added to this: introduction of proteins are not made in the cell nucleus where the chromosomes lie, but outside it in a space that is divided from the nucleus by a membrane. To get the genetic message there it is first copied on to a strand of RNA (ribonucleic acid) which is then transported across the membrane to the site of protein synthesis. That strand is known as messenger RNA. In some of the viruses mentioned in the article, the genes themselves are made of RNA.

Haemoglobin is the protein of the red blood cells which carries oxygen from the lungs to the tissues and

## Max Perutz looks at the useful role molecular biology has played in the study of inherited diseases and cancer

facilitates the return transport of carbon dioxide from the tissues back to the lungs. This protein contains chains of two kinds: the  $\alpha$ -chains, made up of 141, and the  $\beta$ -chains, made up of 146 amino acids. The genes for these chains lie on different chromosomes. Chromosome 16 contains one pair of genes coding for the  $\alpha$ -chains in embryonic haemoglobin and another pair of genes coding for the  $\alpha$ -chains in adult haemoglobin. Chromosome 11 has one pair of genes coding for the  $\beta$ -chains in embryonic haemoglobin and another pair for the  $\beta$ -chains in later foetal life and a third pair for the adult. It used to be one of the basic tenets of molecular biology that the sequence of nucleotide triplets in the gene is colinear with the sequence of amino acids for which it codes; this implies that the 97th triplet along the gene, say, codes for the 97th triplet along the messenger RNA and that in turn codes for the 97th amino acid along the protein chain.

However, this turns out to be true only in bacteria and in some viruses. It came as a great surprise to discover that in higher organisms the genetic messages of most genes are interleaved with passages spelling mostly nonsense, as if the compositor had gone out for a cup of tea while letting his print setting machine pick out letters at random. In consequence, each of the globin genes is split into five segments. The first contains the start signal and the coding triplet (codons for short) for the first 30-odd amino acids; the second segment, called an intervening sequence, contains the coding triplet for the next 70 or so amino acids, the fourth segment contains the coding triplet for the next 40 or so amino acids. After this mixture of sense and nonsense has been transcribed on to the messenger RNA it is edited, like a cine film or a magnetic tape, by excising the nonsense and splicing together the sense. Splicing signals code for the places where this excision and splicing of the messenger RNA must take place.

Genetic diseases can arise whenever this complex mechanism goes wrong. Once, in Africa a child was born with a mutation in the gene for the adult  $\beta$ -globin chain. The offspring of that child who had inherited the mutant haemoglobin gene proved more resistant to malaria than the ones who had not, and more of them survived to reproductive age. This selection repeated itself generation after generation. Eventually the carriers of the mutant gene, might have replaced all the non-carriers, had they not had to pay a price for their advantage. When two carriers mated, half of their children on the average had the good luck to be carriers, but one quarter were afflicted by sickle cell anaemia, a severe blood disease that killed most of them before they grew up. Their deaths, partly balanced by the result that over many generations an equilibrium between carriers and non-carriers established itself. Now many of the sickle cell carriers live in North and Central America, where their resistance to malaria is no longer an advantage and the anaemia of many of their children poses a grave health problem. Biochemical re-

search has shown that the disease is due to a single misprint in the  $\beta$ -globin gene, CAC instead of CTC, which replaces the amino acid glutamate in position 6 of the  $\beta$ -chain by a valine.

Another inherited haemoglobin disease is thalassaemia. It is also found mainly in malarial areas, probably for the same reason as sickle cell anaemia, and it affects millions of people in many parts of the world. Both sickle cell anaemia and thalassaemia can be alleviated by blood transfusions, but eventually both diseases lead to fatal complications. Biochemists have discovered that thalassaemia is caused by an imbalance of the  $\alpha$  and  $\beta$ -globin chains in the red blood cells. This can range from a shortage to a complete absence of one or the other type of chain. Absence of a  $\alpha$ -chain causes babies to be stillborn. Absence of adult  $\beta$ -chains has little adverse effect at birth where foetal  $\beta$ -chains predominate, but it causes severe disease later on.

Until a few years ago the origin of thalassaemia was a mystery; the recently developed methods of gene analysis have shown how it can arise. In some patients entire genes or parts of genes coding for either the  $\alpha$  or the  $\beta$ -chains are deleted. In other patients a variety of subtle mutations was found. One family, for example, carried a mutation which converted the nucleotide triplet coding of the amino acid lysine to a stop signal, so that the synthesis of the adult  $\beta$ -chain was cut short. In other families mutations faulted the signals that code for the correct excision of an intervening sequence or for the splicing of the loose ends of the messenger RNA. In others again the signals that specify the start of transcription of the messenger RNA were found to be scrambled. Every issue of the scientific journals brings to light new faults, showing that thalassaemia has not one single cause, but a multiplicity of different ones.

There is no satisfactory treatment for either sickle cell anaemia or thalassaemia, nor does molecular biology offer any prospects yet of gene therapy, however it does now allow these diseases to be diagnosed in unborn babies. Scientists can find out whether the parents are carriers of these diseases by analysing their DNA. If both parents are carriers, then there is a one in four chance that the baby has the disease. How can one find out? The latest surgical methods allow foetal cells to be taken from the womb, without disturbing the embryo, as early as the seventh week of pregnancy. The haemoglobin genes can then be isolated to determine whether the baby has inherited the abnormality from only one parent or from both.

What about other congenital diseases, such as Down's syndrome, haemophilia, cystic fibrosis or muscular dystrophy? Down's syndrome and other diseases that are accompanied by dislocation of chromosome segments can be diagnosed by chromosome analysis of foetal cells. We know exactly which proteins are affected by the various types of haemophilia, and we also know that the genes coding for these proteins all lie on the X-chromosome. Hence the time is probably not far off when these genes will be isolated. On the

other hand, despite much research, the biochemical abnormalities associated with cystic fibrosis and muscular dystrophy are still unknown. Even so, methods of detecting one abnormal DNA fragment among thousands of normal ones have become so powerful that antenatal tests based on the discovery of such abnormalities may soon be devised even before knowing the biochemical basis of these diseases. Enzyme defects causing about 25 other, rarer congenital diseases can be now detected by biochemical analysis of foetal cells.

In 1910 Peyton Rous, then a young worker at the Rockefeller Institute for Medical Research in New York, discovered that a cell-free filtrate from a chicken tumour, injected into healthy chickens, initiated the growth of tumours. The tumours were caused by a virus, later known as the Rous sarcoma virus. Since then many viruses have been discovered that cause tumours in birds and rodents. On the other hand, with few exceptions, no virally caused tumours have yet been discovered with certainty in man, whence the study of tumour viruses in other species has often been judged irrelevant. This judgment will have to be revised.

When normal skin cells, known as fibroblasts, are cultured on a nutrient medium, they grow and divide only as long as they don't touch their neighbours. Growth stops once the surface is covered with cells. Cancerous cells, on the other hand, proliferate and pile on top of each other as long as the nutrient lasts. If cultured normal cells are infected by a tumour virus, they can also become cancerous. This phenomenon, known as transformation, has been developed into a powerful tool of research.

When chicken fibroblasts are transformed with the Rous sarcoma virus, a copy of the viral chromosome of the host cells and is then replicated with the host chromosomes every time the cells divide. The viral chromosome contains several genes. To find out which of these causes transformation, scientists used enzymes to cut the viral chromosome into small pieces, cloned each piece separately in cell bacteria and introduced the separate clones of DNA into chicken fibroblasts. The results showed that only a single one of the viral genes trans- formed them into cancer cells. It has therefore been called an oncogene. It is coded for a protein that is incorporated in the cell membrane and phosphatase from the energy-rich adenosine triphosphate (ATP) to other proteins. Attachment of phosphate may activate these proteins and make them overpower the controls that normally regulate cell division, so that the cells proliferate. Why they do so, we do not yet know.

One would have thought that this oncogene is a stranger to the chicken cell and transforms it by introducing a protein that is not normally there. Instead, scientists found that normal chicken chromosomes contain a gene that is similar, if not identical, to the same gene code for a protein that is the same as that coded for by the virus, and this protein is indeed present in normal cells. To make sure that this

was really true, the scientists excised the oncogene from the viral chromosome, replaced it by its cellular counterpart and introduced this re-generated chromosome into chicken fibroblasts.

If transformed them, just like the normal cell, it was not necessary to introduce the viral chromosome. Merely attaching to it the strip of DNA that precedes the oncogene in the viral chromosome sufficed to endow the normal cellular gene with the capacity to transform. Why? If the oncogene and its normal cellular counterpart code for the same protein, how can that protein induce cancer in one case and not in the other? The answer seems to be that genes carry a prefix which regulates the rates at which the genetic message is transcribed into messenger RNA and translated into protein.

Apparently the viral prefix is different from the cellular one and puts the gene into higher gear, so that greater amounts of the protein are made. In this instance, cell division appears to be controlled by the amount of one specific protein made by one particular gene. If the amount is small, cell division remains under control; if it is raised, the cells proliferate.

Other transforming viruses have now been found harbouring other oncogenes, each homologous to a different cellular gene, and several of these oncogenes code for proteins with the same or similar activity to that coded for by the Rous sarcoma virus. The viral oncogenes either amplify the amount of protein produced or code for a protein that is more active than its normal cellular counterpart.

These results are revealing, but at first their relevance to human cancer was not obvious, since very few such cancers are definitely known to be associated with a viral infection. It is Burkitt's lymphoma, a cancer of children's lymph associated with the Epstein-Barr herpes virus and present in certain malarial regions of Africa. The action of the Epstein-Barr virus was found to be quite different from that of the Rous sarcoma virus. Instead of introducing a viral oncogene into the cell, a normal cellular gene is transcribed to a different chromosome and spliced into a cluster of genes that normally code for antibodies. So far, it is unclear how the virus causes the transformation and what is its likely biochemical effect. It may put a cellular gene into higher gear, as had happened with the cellular counterpart of the Rous sarcoma oncogene. In that case, overproduction of a particular protein may again be the cause of the cancer. However, no such protein has been found yet.

R. C. Gallo and his colleagues at the National Cancer Institute in Bethesda, Maryland, have recently discovered a virus that causes certain rare but virulent types of leukaemia and lymphoma in man. It is called Human T-cell Leukemia-Lymphoma virus (HTLV) and was first found in a black man of West Indian origin. It has since been spotted among West Indian patients in London, Kyushu, Japan. The virus must be costly, because the original patient's wife, though healthy, carried antibodies against it in her serum, and such antibodies have also been found among apparently healthy people in Kyushu, but only very rarely among the general population. How does the virus cause cancer? At least one copy of the viral chromosome has been

## biologist

found spliced into the patients' chromosomes, but in each patient the position of the splice is different. Unlike the Rous sarcoma virus, HTLV produces no protein that bears any resemblance to any of the host's proteins. It is just conceivable that the virus makes the host's lymph cells proliferate by putting one or other of their own genes into higher gear.

There are two other human cancers now known or suspected to be linked to viral infections. Primary cancer of the liver, one of the most common cancers in the Third World, is now known to be associated with persistent infection with hepatitis B virus, and primary cancer of the cervix of the uterus may be caused by a viral infection. The molecular biology of these associations is not yet understood.

Some cancers are induced by chemicals known as carcinogens. For example, cancer of the scrotum used to be an occupational disease of chimney sweeps which was eventually found to be caused by benzo(a)pyrene, an aromatic compound contained in soot. Recently Bruce Ames at the University of California showed that the potency of carcinogens in animals roughly parallels their power of causing mutations in bacteria, probably because many carcinogens combine with DNA and give rise to errors in its replication. Yet the idea that mutations cause cancer has been hotly contested. In 1966 Peyton Rous wrote: "The hypothesis... remains an analogy... It is presumptuous reasoning that if things have similar attributes they will have similar attributes... it has resulted in no good thing as concerns the cancer problem, but in much that is bad. It has led to a statement in the lay press that since cancer is certainly due to mutations, the possibility of having it is inherent. Here is fatalism to blast many a hope and effort..." It was another rash judgment.

Robert A. Weinberg and his colleagues at the Massachusetts Institute of Technology introduced DNA taken from cells of a human bladder carcinoma into mouse fibroblasts and found that it transformed the cells, while DNA taken from normal human bladder cells failed to do so. Was transformation caused by a single gene, as in the Rous sarcoma virus? Further research showed that this was indeed the case. The bladder carcinoma cells possessed an oncogene capable of transforming mouse fibroblasts, while normal bladder cells possessed a homologous gene which lacked transforming properties. Why? Both genes coded for what at first looked like the same protein.

The answer came when both genes had been deciphered, and it was found that the transforming gene differed from the normal one in only one single nucleotide. Transformation was due to a point mutation which had replaced the code word GGC by the word CTC, causing the amino acid glycine in position 12 of the protein chain to be replaced by the amino acid valine, just as the mutation from CAC to CTC and the consequent replacement of glutamic acid by valine had been the cause of sickle cell anaemia.

Weinberg and his colleagues then piled proof upon proof to demonstrate that this minute chemical change really was sufficient to transform a normal cell into a malignant one. They excised a small fragment of DNA containing the mutant site from the oncogene and stitched it into place the homologous fragment from the normal cellular gene; this replacement destroyed the transform-



A child suffering from sickle cell anaemia

ing capacity of the oncogene. The converse operation made the normal gene carcinogenic. Here then is the first demonstration of an alteration in cellular DNA which is directly related to the growth of a cancer. The oncogenes found in this bladder carcinoma and in other tumours have become the subject of intense research in many laboratories. The bladder carcinoma oncogene turns out to be almost identical to the oncogenes of at least three tumour viruses. All code for similar proteins, and all these proteins differ from their homologous normal cellular protein at the same position, number 12 along the chain, where the bladder carcinoma protein differs from the normal bladder protein; only the replacements differ: in one virus the glycine in position 12 is replaced by serine and in a third by lysine. The results suggest that this particular protein functions normally only with glycine in position 12; any other amino acid in that position causes cells to proliferate. Why this should happen is still obscure.

It was soon found that the normal cellular counterpart of the oncogene, the gene that codes for glycine in position 12 can also transform fibroblasts provided it is joined to a piece of DNA that shifts it into higher gear and multiplies the amount of the normal protein made by that gene. This means that one and the same protein can cause cells to proliferate in two different ways, either if it is activated by a mutation or if it is produced in excessive amounts. Like archaeologists guessing the civilization associated with a grave from a single potsherd, biochemists can sometimes detect the identity of a protein from a fragment of its lower incidence rates of cancers of the respiratory, gastrointestinal and genital systems than members of other religious groups living in the same states. Every cancer that is common in one place is rare somewhere else. This means that cancers must have causes, and the molecular mechanisms of carcinogenesis may help us to find out what they are, and how they could be avoided.

The author is a member of the scientific staff of the Medical Research Council's Laboratory of Molecular Biology, Cambridge. He recently retired as its chairman.

The wealth and consistency of the observations I have described make me feel confident that the genetic events now unravelled repre-

Revealing cancer as a speciality is a conversation stopper says A. H. Calvert

## The side effects for doctors

Cancer is a common disease. Almost all of us have known a close friend or relative who has contracted it. Although many of us have firsthand experience of cancer, the disease is still surrounded by an aura of fear, confusion and mystique which is far greater than that applied to other potentially fatal diseases such as coronary heart disease.

In my experience at a cancer hospital it is surprising how many patients who arrive have not apparently been told that they have cancer. One patient, when I asked him if he knew what was wrong, told me that he had discovered that it was a cancer hospital from the map, so he assumed that he had cancer. Others have recounted the most bizarre stories of their condition, which sometimes would appear to have been derived from explanations 'so couched in euphemisms that they were impossible to understand, sometimes from downright lies about their condition and sometimes from information gleaned from (usually inaccurate) professional as a whole was able to apply the same degree of imagination to the treatment of cancer as they do to trying to disguise the diagnosis from their patients we might be a little further forward.

Explaining the diagnosis, the natural history of the disease, the options which are open for treatment and the likely outcome to the patients is usually met by a feeling of grateful relief. Most of us are strong enough to face the knowledge of our own demise; it is only telling others of theirs which is almost too much to bear. Nevertheless, quite frequently the same patient will, within hours of the explanation, apparently have quite forgotten what went before and still adhere to some other quite spurious explanation of his symptoms or believe that he has had nothing explained. There is clearly a reluctance to receive news of cancer as well as to give it.

A doctor at a social gathering tends to get a lot of unsolicited consultations. One good way to stop these is to reveal that your speciality is cancer. This tends to provoke one of two responses. You are either accused of being an unashamed experimentalist who wishes only to test horrendous treatments on the dying, or you are offered sympathy and admiration for doing such a depressing and unsuccessful job. Neither of these reactions is entirely justified, as can be illustrated by some actual examples of success and failure in cancer treatment.

The practice of cancer medicine is frequently successful and can be very rewarding when a patient with a disseminated disease is cured. The use of experimental treatments is making slow but steady improvements in the results of treatment. These points are well illustrated by the unobtrusive revolution which has taken place in the treatment of childhood leukaemia. About 30 years ago, when the average survival of a child with this condition was a few months, the drug methotrexate, which antagonizes one of the natural B vitamins, was introduced. Survival was increased by a few months only and side-effects were common. The morality of using this treatment was not unreasonably questioned. Nevertheless, about half the patients with childhood leukaemia are now cured and side-effects are tolerable. It must be admitted, however, that many patients with more refractory tumours cannot be cured, but only given palliative treatment. In my experience, cancer doctors are more conscious than many other specialists are of the side-effects of their treatments and are often the first to accept that their role may be to increase comfort and palliatives rather than immortality.

There are many things in our society which arise without an obvious cause, which seem unpreventable and which if left alone develop into something rather unpleasant. We should approach these by whatever means our knowledge and intellect suggest. We may be able to prevent them, we may be able to treat them, or we might simply have to learn to live with them. Unthinking adherence to the latest fad, however, be it the adoption of a particular lifestyle, the excessive promotion of a currently fashionable field of research, or the use of an unproven remedy is neither reasonable nor is it likely to be profitable.

The author is a member of the Department of Biochemical Pharmacology at the Royal Cancer Hospital, Sutton.

There is also the fear that cancer may be unpleasant, disfiguring and painful. In some instances this may be true, but in many others it may only be obvious as the result of careful medical examination. The population attending our outpatient clinic looks more like a normal group of people than an illustration by Hieronymus Bosch. Other diseases which we accept socially may be far more unpleasant to have. Surely it is better to succumb rapidly to lung cancer than to shuffle slowly off the mortal coil as a respiratory victim of chronic bronchitis, unable to walk, hardly able to talk, with the mental faculties slowly fading as the oxygen runs out.

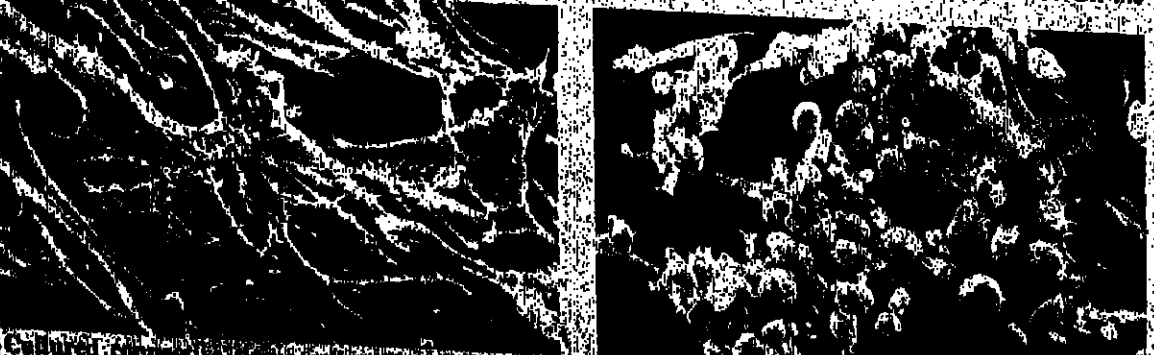
On learning that he has cancer a patient usually asks what has caused it. Often he asks this first before he learns of his treatment and prognosis. In a few cases it is possible to give a satisfactory answer. The fact that cigarettes cause lung cancer is known, although it was probably the most unpopular discovery in medical history. A few hazardous chemicals are also known to cause certain types of cancer. However, for the majority of other cancers the cause is simply not known. Theories concerning dietary effects, viruses, the immune system, unidentified pollutants and so on abound but none of these is unequivocally proven to be the cause of the common human cancers. The theory that cancer might arise as a random event and have no absolute cause is not easily accepted, although the mathematical basis for this is sound. The lack of a known cause makes cancer like a misdirected heavenly thunderbolt, irrational, cruel and unfair in its choice of victims.

Screening for cancer has been undertaken widely, the underlying assumption being that the earlier diagnosis of a cancer will increase the chance of a cure. For some cancers screening seems to have been successful but for others, such as breast cancer, it is not yet clear that the earlier diagnosis has led to much improvement in survival. With sufficient effort in screening the population it is certainly possible to detect still adhere to some other quite spurious explanation of his symptoms or believe that he has had nothing explained. There is clearly a reluctance to receive news of cancer as well as to give it.

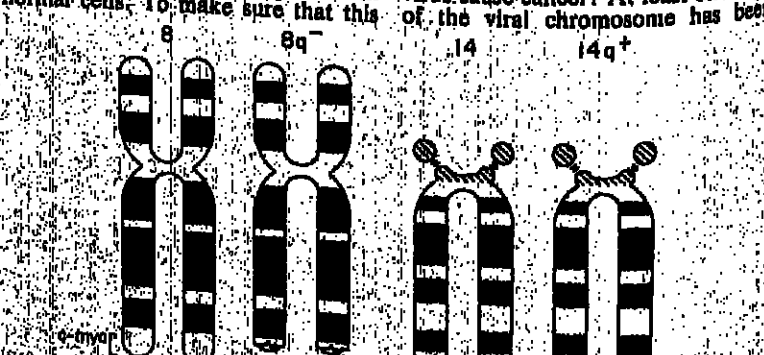
difficult to know how much of the apparently improved survival is really due to better treatment of the disease. Many cancers are technically difficult or impossible to screen for and no adequate treatment exists, however early they are detected. Many other medical conditions can at least be contained by a suitable alteration of lifestyle. A diabetic changes his diet. A patient with angina knows that if he avoids strenuous exercise he will avoid the angina. A patient with allergic asthma will learn to avoid those things to which he is allergic. No way has been found by which a cancer sufferer may change his lifestyle in order to affect the progression of his disease. The autonomy of the tumour, which renders the patient totally reliant upon outside intervention, is probably the most frightening aspect of the disease.

There are many things in our society which arise without an obvious cause, which seem unpreventable and which if left alone develop into something rather unpleasant. We should approach these by whatever means our knowledge and intellect suggest. We may be able to prevent them, we may be able to treat them, or we might simply have to learn to live with them. Unthinking adherence to the latest fad, however, be it the adoption of a particular lifestyle, the excessive promotion of a currently fashionable field of research, or the use of an unproven remedy is neither reasonable nor is it likely to be profitable.

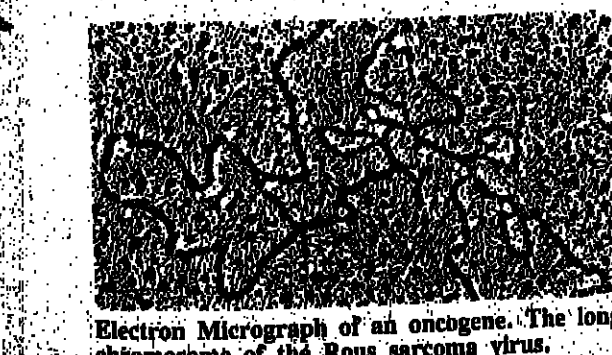
The author is a member of the Department of Biochemical Pharmacology at the Royal Cancer Hospital, Sutton.



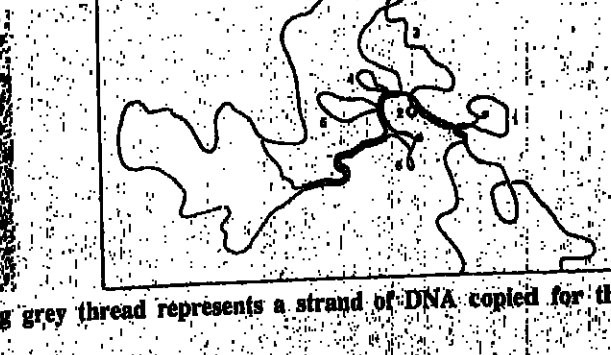
Electron Micrograph of an oncogene. The long grey thread represents a strand of DNA coiled for the chromosome of the Rous sarcoma virus.



Human chromosomes 8 and 14 in lympho cells of a normal individual (left) and a child suffering from Burkitt's lymphoma (right)



Electron Micrograph of an oncogene. The long grey thread represents a strand of DNA coiled for the chromosome of the Rous sarcoma virus.



Human chromosomes 8 and 14 in lympho cells of a child suffering from Burkitt's lymphoma (right)



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## BOOKS

### World of work

**Employment and Unemployment: a social-psychological analysis** by Marie Jahoda  
Cambridge University Press,  
£10.50 and £3.95  
ISBN 0 521 24294 0 and 28586 0  
**The Mechanisms of Job Stress and Change**  
by J. R. P. French, Jr, R. D. Caplan  
and R. Van Harrison  
Wiley, £14.95  
ISBN 0 471 10177 X

It is remarkable how rapidly a more gloomy view about the future of employment has become widely accepted. Politicians see the charm of accepting the inevitability of global processes producing the de-industrialization of Britain, since that absolves them from responsibility. For different reasons the consensus of scholarly opinion now seems to accept, however reluctantly, the continuation of high rates of unemployment and acknowledges that the world of work will never be quite the same again.

Faced with this depressing future, optimists may seek to emphasize the positive advantages. So much of employment seems to be objectively unsatisfying. If not degrading, that we would be better off without it. If people are liberated from such burdens they may be free to do the work they really want to do, whether or not that is paid. Others look to self-help, the informal economy and other forms of communal work.

These books demonstrate in distinct and contrasting ways that work, employment and unemployment cannot be understood atheoretically. The social relations of work cannot be described adequately as simply "emerging" from a given context. The inevitable weaknesses of social psychology should surely guide others to do better.

**R. E. Pahl**

*R. E. Pahl is professor of sociology at the University of Kent.*

## Taken for granted

**Central Grants to Local Government: the political and economic impact of the rate support grant in England and Wales** by R. J. Bennett  
Cambridge University Press, £24.00  
ISBN 0 521 24908 2

In many ways this book is an impressive achievement, and it may well prove informative and stimulating to the general reader (if such exist in this rather abstruse subject). But for the serious student, the book's main shortcoming - which is its near total lack of logical coherence and irredeemable flaw.

The book is in three parts. The first sets out the underlying principles, and history, of the rate support grant, with particular reference to recent developments. The second analyses the operation of the local finance system in terms of the distribution of tax revenues, grants and expenditure across local authorities.

The final part offers some proposals for reform. The discussion throughout the book is generally clear, comprehensive and concise, and draws on a remarkably wide range of literature. There is a mass of empirical evidence, the collection, presentation and analysis of which represents an immense amount of valuable work. The spatial dimensions of the problem are well brought out with frequent use of maps. Anyone who has written on this subject will recognize how substantial these achievements are, and it is therefore the more regrettable that the book is in other ways so unimpressive.

The trouble starts as soon as the book leaves the realm of description and enters that of theory and analysis. It seems to me that Dr Bennett's use of theoretical concepts in a rather loose way, without attempting precise definitions and thus avoiding the logical constraints on the relationship between

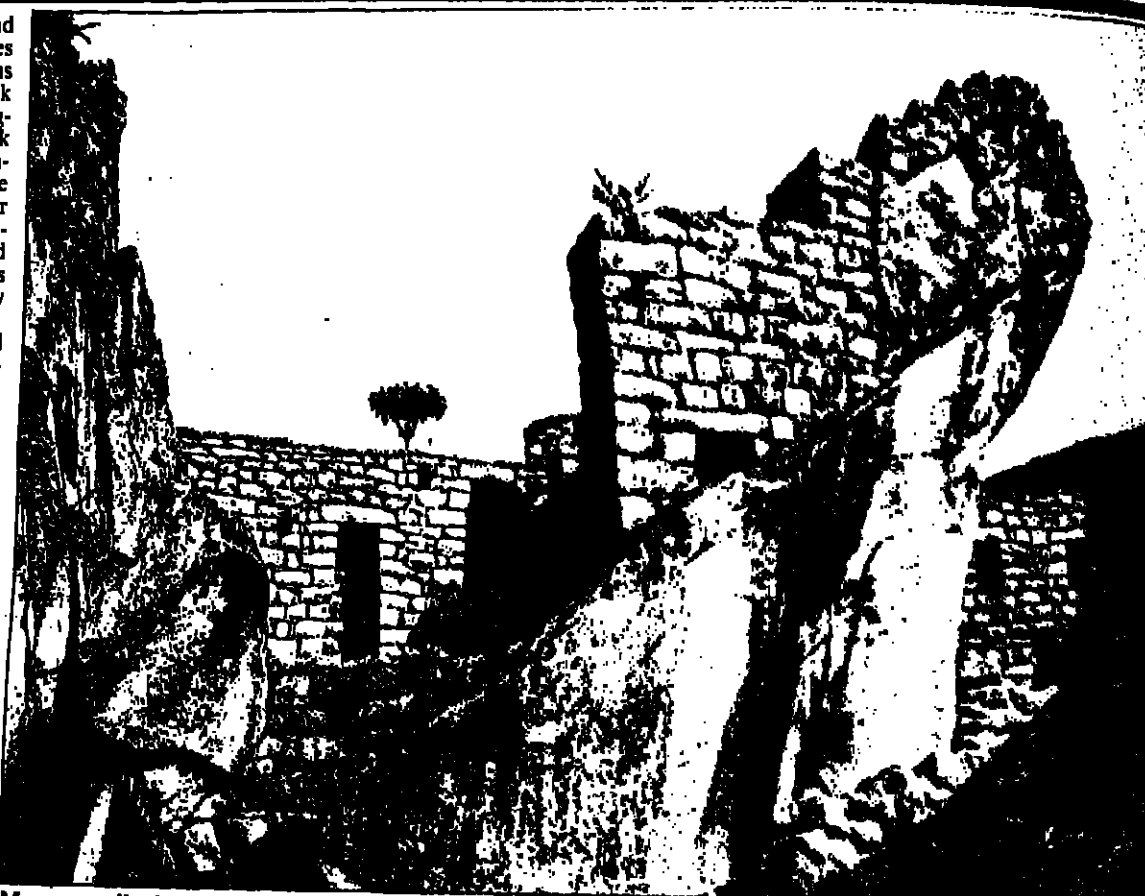
can aim; it assigns social status and clarifies personal identity; it requires regular activity." Her prescriptions are unequivocal: eliminate the black economy and create more meaningful employment - less time at work for more people with more self-management (possibly in the style of the Spanish cooperative, Mondragon), or more participatory industrial democracy. There is much that is wise and humane in this book and its concerns should be high on the contemporary political agenda.

The study by French, Caplan and Harrison, by contrast, is so methodologically rigorous that those not used to the statistical sophistication of the University of Michigan Institute of Social Research are unlikely to be attracted to it. In a phrase this study attempts to quantify the level of mental health in employment following ideas developed by Marie Jahoda in another context.

One is inclined to summarize the book somewhat trivialously - if the wrong chap is in the wrong job he's in danger of cracking up: signs of strain and boredom, anxiety, depression, somatic complaints, smoking, drinking coffee and so on, all leading to death. Wrong P (chap) wrong E (job) might be due to "a deficit of ability". If this battery of tests really worked, I suppose everyone who could fit into a work slot would be happily placed, and the rest would be sacked to save their lives. This ponderous and humourless book suffers from too much skill in manipulating data, and too little imagination in presenting the results.

These books demonstrate in distinct and contrasting ways that work, employment and unemployment cannot be understood atheoretically. The social relations of work cannot be described adequately as simply "emerging" from a given context. The inevitable weaknesses of social psychology should surely guide others to do better.

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Masonry walls rise above the central rock spur of the prison group in Machu Picchu in Peru. The niches may have held mummies or been used to incarcerate prisoners. Illustration taken from *Monuments of the Incas* - text by John Hemming, photographs by Edward Ranney - published next week by Hutchinson at £27.00.

between concepts that such definitions imply. An example of a logical constraint is provided by the definition of a local authority's spending need. Generally, this is defined as the amount an authority would need to spend in order to provide some given standard of service. If one adopts this definition, it seems to make little sense to say "it is normal to set the standard of needs very low (usually at the least needy authority)" (page 33) or "Needs vary between local authorities depending on... the level of their services" (page 133). Of course, Bennett may have in mind a different definition of needs, but he does not tell us what it is so the argument is bound to seem confused.

Because of this lack of precision, I believe the book is based on a confused and inconsistent view of how the rate support grant system actually works. Chapter two of the book introduces the general principles of grant distribution underlying the rate support grant. I will admit to having struggled for hours over this chapter without being able to piece together a consistent theoretical structure. I have noted more than twenty separate instances in this chapter where Dr Bennett's argument seems to me substantially misleading.

These problems carry over into subsequent chapters. For example, in chapter eight, Dr Bennett attempts to measure the redistributive effect of the rate support grant by a statistical regression exercise, relating the grant to local government expenditure, rateable value and rate poundage. However, these variables jointly make up the local authority's budget constraint and Dr Bennett comes perilously close to estimating an accounting identity. (An accounting identity in that, because of standard conventions of double-entry bookkeeping, a local authority's income must equal its expenditure, and a therefore be equal to the difference between its expenditure and its income from all other sources.) Clearly, nothing can be learnt about the redistributive effect of grant from such a procedure.

Similarly, in chapter nine local government expenditure decisions are modelled by means of a simultaneous equation system, the logic of which is found impregnable, but which also fails to take account of the structural constraints a local authority faces (in particular the grant formula and the balanced budget requirement). Again, the only consistently "significant" variables in the estimated equations turn out to be those necessarily present through the budget constraint.

These faulty procedures lead to seriously misleading conclusions. On page 243, Dr Bennett sets out a typology of local authorities. The

major examples of local authorities cited in the category of "low expenditure, low tax, advantaged normal low provider (of services)" are Islington and Haringey, while in the category "highly disadvantaged: stressed" we find Bexley and East Sussex. The departure from reality generated by Dr Bennett's analytical scheme could not be more complete.

In some ways this book gives the impression of ideas having been collected together and put to use in a rather opportunistic way, rather than having been absorbed and synthesized into a coherent theoretical structure. Judged by the standards of advancing understanding of its subject, this book seems to me least by serious problems. But as a description and discussion of the grant system for the less theoretically inclined reader, the book has many merits and is more up-to-date and more palatable in style than most of its competitors.

**Richard Jackman**

*Richard Jackman is a lecturer in economics at the London School of Economics.*

## Sliding upwards

**Alcohol Problems and Alcohol Control in Europe** by Phil Davies and Dermot Walsh  
Croom Helm, £14.95  
ISBN 0 7099 0816 4

Here are some of the statistics given in this book: Between 1970 and 1979 deaths from cirrhosis in the UK rose by 56 per cent. Admissions to psychiatric hospitals for treatment of alcoholism and alcohol psychosis climbed by 74 per cent between 1970 and 1977. Convictions for public drunkenness rose by about 22 per cent from 1970 to 1979, reaching a record 119,477 for the year's total. And the backdrop to these trends? Per capita alcohol consumption in this country increased by 38 per cent between 1970 and 1979, while, between 1950 and 1979 it nearly doubled.

There is persuasive evidence that alcohol has a lot to do with alcoholism. Those British figures which creased drinking and, augmented experience of many other countries, Exceptions can be found, but it is drinks more it is going to have at least proportionately more alcohol-

Such conclusions have led to an international interest in potential ways of reversing the upward march in alcohol consumption levels which are today affecting industrialized and developing countries alike. The statistical basis of the research is at with traps, and any measures which are proposed in the interest of public health are likely to be met with a conjoint alarm by the liquor industry eager for profit and by governments greedy for revenue.

For anyone who is interested in debate of very great social importance in its own right and who subtly exemplifies some important general issues related to health and social policy, *Alcohol Problems and Alcohol Control in Europe* will be of great value. Specialists in this field will already have made a dash to the bookshelves, but it is to be hoped that this book will also draw many other people into an informed participation in the discussion.

The book is particularly valuable for its remarkably comprehensive and intelligible review chapters, which summarize the present state of research and theory, and fairly lay out the contending arguments. Inevitably the presentation of technical issues has been compressed and simplified, and the econometrician may for instance be worried by the failure adequately to explore the relationship between changes in alcohol consumption, when set against the interactive influences of changes in the real price of alcohol and changes in wages - it is not sufficient to look at price changes in isolation.

The book then offers individual case-studies of 16 European countries in relation to drinking problems, drinking, and control policies. Anyone who has ever tried to collect reliable data on these topics from even one country will stand in awe before the efforts and dedication which Davies and Walsh have displayed in putting this compendium together. However, it would have been a bonus if they had given us a chapter on the tangled machinations of the EEC and its Common Agricultural Policy in relation to alcohol production and trade.

At present few countries take drinking problems seriously at government level and the EEC is more concerned with wine lakes than alcoholism. The essential message of this book is that the seriousness of this debate does not effectively reach public consciousness. The data given in these chapters will very soon be sadly outdated as every trend continues to slide inexorably and damagingly upwards.

**Griffith Edwards**

*Professor Edwards is Director of the Addiction Research Unit at the Institute of Psychiatry, London.*

## BOOKS

### Dioxin legend

**The Chemical Scythe: lessons of 2,4,5-T and dioxin**  
by Alastair Hay  
Plenum Press, £19.25  
ISBN 0 306 40973 9

It is now over six years since, in Seveso, the peace of a Lombardy weekend was broken by an explosion caused by hot vapours escaping from a chemical reactor. This event, and the consequent skin disease suffered by 187 children of the area, focused worldwide public attention on the chlorinated dioxins, contaminants formed in several manufacturing processes. During the past few years the dioxin legend has been swollen by a number of articles on Seveso and related incidents. As these have frequently been sensational and often ill-informed or inaccurate, *The Chemical Scythe* now offers, at least in part, a valuable counterbalance to earlier effusions.

As the first title in a series called "Disaster Research in Practice", the book is written for a dual readership of laymen and scientists. How well can it reach both? Five chapters are written for the scientists and cover chemical, toxicological and medical aspects of the dioxins, their precursors and the products which they contaminate. The first two, on chemistry and toxicology, bring together a well-referenced summary of results from a large number of scientific papers. Among these are one or two articles from journals dated 1981, commendable in a book published in the United States in 1982. The coverage is good enough to make those two chapters alone a valuable compendium of available data. However, they do not have the attributes of critical review; this is unfortunate, as some of the conflicting toxicological results need to be reassessed in the light of other knowledge.

The last three chapters of this first section are disappointing. The decision to give a whole chapter over to a discussion of the bactericide hexachlorophene is curious. Although made from trichlorophenol, and therefore possibly containing trace quantities of dioxins, there is no suggestion that the neurological effects ascribed to this compound are caused by anything other than the bactericide itself. Instead would it not have been better to have included material on the dioxin-like properties of the chlorinated azobenzene precursors and chloracneis themselves, they rate only a brief mention on page 90.

The slim section on 2,4,5-T itself, a herbicide and chemical relative of dioxin, is mainly concerned with establishing the availability of alternative formulations. However, it might have been more helpful if more detail had been included of its mode of action as a herbicide and of its effect as a toxicant in animals. At this point the book turns to its main study: man in relation to the dioxins. Indeed, chapter five in the previous section provides a good introduction to this second section. Anecdotal, with little reference to the admittedly sparse medical and scientific literature, it describes chloracne, a skin condition widely regarded as the only effect consistently attributable to human poisoning by dioxin and its analogues.

The link between the chemical and the disease was made when the same clinician saw patients both from a laboratory and from industry. Although until Seveso chloracne had only rarely been seen among non-industrial people, these workers, in scattered groups throughout the world, now represent the only population on which it is feasible to study the mortality and morbidity studies. The causes of their exposure, and the results, are described here in varying detail. Although some reports are given without comment, others the author's conclusions seem to be based on insufficient

evidence. Thus, is it necessary to rely on what is apparently either self-diagnosis or diagnosis by newspaper reporter (page 120) in order to make the point that additional epidemiological investigation is needed?

The inclusion of the Missouri episode in the list of industrial accidents is a salutary reminder that good industrial hygiene does not end in the factory; disposal of wastes must also be controlled. It also makes for highly topical reading now that the reactor and redispersal of the Missouri wastes at Times Beach has brought the whole issue back to the newspapers. Here there is a clear statement, valid throughout this section, and also in relation to the Love Canal, that no country has handled its dioxin problems without some degree of bureaucratic delay, mismanagement and poor science.

Chapters on the military usage of 2,4,5-T in south-east Asia indicate the conflicting extent of claims as to the safety or hazards of this herbicide. The difficulties of assessing exposure to dioxin contaminants provides a contrast with the situation in Seveso, for which a clear temporal and spatial correlation between the incidence of chloracne and the level of contamination is now well known.

If there is one lesson to be learnt from Seveso it is that the possibility of a long-term hazard to health, incapable of being defined precisely, is a great worry to an affected population. Any measures which can be implemented rapidly and which will minimize exposure are likely to alleviate this worry. The question as to whether the explosion at Seveso could have been prevented is wisely left open. However, it does seem that the accident represents yet another example of a change in reactor conditions being confounded by unforeseen problems.

This book offers a valuable summary of scientific and medical data, with a vengeance.

**Edward Yoxen**

*Edward Yoxen is lecturer in science at the University of Manchester.*

## Genetic politics

**Genetic Alchemy: the social history of the recombinant DNA controversy** by Sheldon Krimsky  
MIT Press, £17.50  
ISBN 0 262 11083 0

Although this book purports to be a social history of the controversy over recombinant DNA research, from its first stirrings in 1971, through the impassioned debates in American university cities in 1976 and 1977 to the relative quiet of contemporary industrial gene-splicing, it is neither a social history, nor a work of political sociology; and that is a shame. It is, however, a very interesting, well-written, scholarly and informative book, from someone who at national and local levels was a participant in that debate. At the moment it has no real competitors, although it makes a fascinating contrast with the documentary history of gene cloning produced by the molecular biologists James Watson and John Tootz in *The DNA Story* (Freeman, 1982).

Dr Krimsky's commitment to the idea of public participation in the making of science policy is clear throughout, as is his critical attitude to the way in which evidence for the safety of recombinant DNA research was marshalled and selectively presented to policy-makers. This then is an analytical history of scientific and political conflict. It is based on the reconstruction of argument and the demonstration of how scientific claims were put together and inserted into political negotiations. It is a critical history, the empirical material being taken largely from the Oral History Archives at the Massachusetts Institute of Technology, which Dr Krimsky has clearly worked through exhaustively. Indeed, one of the strengths of this book is the wealth of documentary material that is placed on display.

European readers, however, will find the analysis a little odd, as virtually no mention is made of events on this side of the Atlantic. There is no discussion of the Ashby report, its effect as a toxicant in animals, nor of the role of the European Molecular Biology Organization nor of the genetic manipulation committee of the International Council of Scientific Unions. Nor does Dr Krimsky discuss the variation in the relative strictness of national guidelines.

Second, the structure of the narrative is confusing in parts. Chapter 4, "After the guidelines", turns out to be a summary of the rest of the book, for example, on the position of the 1974 Asilomar conference or the reports of the crucial Rowe-Martin experiments with polyoma virus - the effect is somewhat pedantic re-casting of everyone's arguments in syllogistic form. Although this can be illuminating - for example, on the position of the 1974 Asilomar conference or the reports of the crucial Rowe-Martin experiments with polyoma virus - the effect is somewhat pedantic re-casting of everyone's arguments in syllogistic form.

Overall, it means that the fluidity of debate is turned into a series of texts, that are decomposed into their elementary propositions. This is intellectualist historiography with a vengeance.

**Rupert French**

*Rupert French is formerly professor of the history of science and technology at Imperial College, London.*

and also of the historical sequences of episodes of dioxin poisoning. Although inaccuracies seem to be rare, surely the confusion on page 81 between the structure of the title compound, 2,4,5-T, and that of its analogue 2,4-D could have been avoided. Certain aspects of the second half may be too technical for the lay reader, and the interpretation of some observations could well be disputed. I hope, however, that many of the questions posed by the author, and necessarily left unanswered, will find their solutions in the next few years.

**J. B. Greig**

*J. B. Greig is a member of the senior scientific staff of the division of biochemical pharmacology at the MRC Toxicology Unit, Carshalton, Surrey.*

## Compost of ideas

**Metaphysics and Natural Philosophy: the problem of substance in classical physics** by P. M. Harman  
Harvester Press, £18.95  
ISBN 0 7108 0451 2

"By 'metaphysics'," writes the author, "I mean the attempt to justify the conceptual rationale of a scientific theory by appeal to regulative maxims such as the law of causality or to criteria of simplicity, analogy or continuity; as well as to attempts [sic] to justify the intelligibility of a theory by an explication of the meaning of concepts of matter or force."

The other component of the title is not precisely defined, but I take it that for Dr Harman "natural philosophy" is the theoretical part of physics, and not a synonym for the whole of it, as in the Scottish universities. His prime contention is that the enunciation of metaphysical foundations was a constitutive part of "classical physics", a contention supported by studies of Newton, Leibniz, Kant, Faraday, Helmholtz and Maxwell.

To begin with the issue of whether or not all scientists are metaphysicians (a false claim, I believe), it is surely beyond doubt that some scientists, including those interested in the metaphysical origins of the scientific method, just as some have also been interested in the divine origins of the world, are metaphysicians. The search for something beyond force-mechanics was not confined to physics.

Dr Harman is a learned and intelligent student of these questions, but I cannot leave unchallenged the assertion that Newton was aware that "the term 'metaphysics' had been used by Descartes to denote the tendency of bodies to assume a state of rest rather than a state of motion". Descartes (*Principles*, part two, §37) *Weltbild*, just as some have also been interested in the divine origins of the world, are metaphysicians. The search for something beyond force-mechanics was not confined to physics.

What I most deplore in this book, however, in many aspects of learning so commendable, is that it should be such hard reading, though rebarbative is perhaps too severe an epithet. Should not a book about other books be more, rather than less approachable than they are?

**Rupert French**

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**Roger French**  
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## Plausible enough

**A History of Women's Bodies** by Edward Shorter  
Allen Lane, £14.95  
ISBN 0 7139 1581 1

It seems so plausible. In the midst of the thriving feminist industry, no one would deny that women are different from men; and irreducibly, biologically different, in their structure and reproductive function. It seems plausible then, that these differences have meant that history has treated women differently. Shorter argues that the burdens of pregnancy, large families and women's diseases oppressed women to the degree that they could not resist, and even they accepted, male domination. He further argues that modern medicine, by lightening the load of these burdens, made it possible for women to throw off this domination.

But what turns plausibility into conviction? For the historian, surely, historical evidence. For the radical feminist, probably, the justice of the cause. In seeking to convince the reader, Shorter uses both. They are juxtaposed somewhat uneasily in this book, for feminism is essentially a political movement - in seeking changes in line with the interests of its members - and the rationality it uses and the evidence it seeks are different from those of the historian, whose purposes are different.

Shorter the feminist embraces the cause and steers his book to where the action is: *A History of Women's Bodies*; chapter one, "Men, women and sex". His language shows that his heart is in the right place (women were "victimized" unconsciously by men, and even by nature; men's attentions were "malignant aggression"); and where it risks to the (men's) "wrenching" fear of the uterus (it is still clearly a good feminist cause). The English reader might find the language at other times slightly irritating, a North American vernacular that moves from the campus of the sixties ("let's back up" for "to recapitulate") to the mountains ("grizzly" for "grisy").

Shorter the historian brings special pleading to his argument. He impresses with the number of his sources, but less with his handling of them. By their very nature, most of the topics he deals with are those most people wanted to keep quiet about: embarrassing diseases and sexual behaviour. These things do not readily generate historical records. Indeed, what records there are have generally survived because these relate to something unusual, or when things began to change, like the introduction of male supervision of childbirth.

But Shorter's case rests on the conditions he describes being general, or at least widespread, to the historical "silence" of the topics and the peculiarity of the discussion of the sources and what it is legitimate to infer from them. However, Shorter's treatment is unrepresentatively anecdotal. He draws vivid pictures indeed, but he does not emphasize that the sources he uses are almost always "loaded": rhetoric by an interested party, like an eighteenth-century physician's tract against midwives or Marie Stopes on unwanted pregnancy.

Evidence drawn from folklore also has to be treated with caution. Pre-Christian Latvian sexual folk songs are very quotable, but what can we really draw from them about the psychology and behaviour of the singers? Peasants in Saxony a thousand years ago drove stakes through the bodies of women dying undelivered in childbirth. Shorter links these and many more less bizarre items with a "massive male indifference" to female suffering combined with a "visceral male fear" of the uterus and its sexual and "magical" power. "Women's bodies are dangerous." It is all very plausible. But Shorter has not demonstrated it.

**Roger French**

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# BOOKS

## EUROPEAN STUDIES

### Chapters and probes

Montaigne: essays in memory of Richard Sayce  
edited by I. D. McFarlane and Ian Maclean  
Clarendon Press: Oxford University Press, £17.50  
ISBN 0 19 815769 X

Richard Sayce cared deeply about everything to do with the academic life, teaching first, then books, preferably old ones, then the college and all his other academic duties. In which his own research and his supervision of graduate pupils shared first place. I knew him well, both as a student and later as a colleague, although I was never formally his pupil. He did however examine my DPhil with unfailing courtesy and an unerring acumen that let no slip go undetected.

In spite of sometimes large areas of concern about other authors, he cared most deeply and for longest about Montaigne. His *Festschrift* wisely reflects this. There are only seven articles, plus a little ancillary material, but that allows the book to achieve the status of necessary reading even for undergraduate students of Montaigne.

The editors have had some luck. The first article is not only the first major hypothesis about the genesis of the essays since Villey soon after the turn of the century, but it is brilliant (living commentator on the *Essays*, building on and fully acknowledging the work of the acknowledged brilliant, Cate Brush). These 11 pages alone contribute more to understanding Montaigne's text than most books on the subject, and must be essential reading for neophytes as well as for established scholars.

In the second article David Maclean takes over some of Richard Sayce's unfinished work and demonstrates, I think irrefutably, the reliability of the 1955 edition, although since Strouven in 1906 the "Bordeaux copy" (a 1588 copy with alterations

and marginal editions made before Montaigne's death in 1592) has been the basis for almost all editions. However, the 1955 copy needs really to be used in conjunction with all its known predecessors (there may never have been a "fourth" edition preceding the "fifth" of 1588, but if there was one there is no longer an extant copy), at least until we have a new properly critical edition, if the evolution of the *Essays* is to be understood. Villey's system of marking the different stages of the text "a" (1580), "b" (1588) and "c" (1595) is no doubt useful, but it is a very rough guide to the modifications and additions.

Margaret McGowan writes essentially on the instability of Montaigne's language, why he uses so many different words and phrases for closely related concepts, and how this mirrors something about his central ambition to write about a constantly changing self and a changing world, while Carol Clark, fascinating on the psychological vocabulary available to Montaigne, necessarily and rightly raises some important and unresolved problems about how to understand a semi-technical terminology - of which in the sixteenth century as a whole there has been no proper study, at least in so far as its literary usage is concerned. What did Montaigne mean by "dieu" or "passion", for example, and what was the half-baked, semi-stoic, partly neoplatonist framework into which it had to be understood? This is a salutary reminder both that Montaigne's psychology cannot either be dismissed as impossibly unscientific, or "translated" into modern terms until it slots into some twentieth-century system, although I am not sure that even Scotus, with whom the term is primarily associated, let alone "the scholastics", would have regarded Montaigne's "forme sienne" as meaning the same as *haecceitas*, a word which was coined in a completely different context and conflated from any Montaigne was concerned with.

Oddly it is the volume's two editors who commit the serious sins: carefully avoided by the other contributors, of mentioning Montaigne's "essay" in this or that. Montaigne wrote *chapters* of a book called "Les Essais", best translated as something like "probes" or "experiments". "Essay" as used in modern English is a different genre, even if Montaigne may be thought to have helped to establish it. However, I. D. McFarlane on the subject of Montaigne's concept of virtue, and for that matter vice, puts his finger on one of the most sensitive of all

the ethical issues raised by Montaigne, linking up well with Carol Clark's account of Montaigne's psychology, or perhaps physiology. Ian Maclean's piece reminds us of Montaigne's (somewhat affected?) attacks on speculative as distinct from practical or moral philosophy, and his concepts of God, nature, reason, imagination, and self, while showing that Montaigne, too, gets entangled in his own web of words. F. C. Cave concludes with a typically central and brilliant account of how Montaigne at different periods read, assimilated his reading, and achieved precisely the disarming effect on his readers which he was striving for, forcing them to choose from, or simultaneously accept, a multiplicity of meanings and to question the status of "authorities". The comments, if relatively straightforward, are acute and perceptive, and chosen from the depths of a close knowledge of the text. They bring Dr Cave back to some of his favourite themes, intertextuality and the by no means merely passive role of any book's reader.

This is the best book to have appeared on Montaigne for many years. It deals expertly with many of the most important themes and is limpidly enough written to make an excellent introduction to the author as well as a fitting commemoration to Richard Sayce.

A. H. T. Levi

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### Fusion of opposites

Ibsen: the open vision  
by John S. Chamberlain  
Athlone Press, £15.00  
ISBN 0 485 11227 2

Buck from over, buck from under. In a moment clashed together, Scattering foam-flecks all around!

Professor Chamberlain's book can be defined in terms of Peer Gynt, ride, not merely in its tracing of the clash of opposites in Ibsen's play, he concentrates on *Peer Gynt*, *Ghosts*, *The Wild Duck* and *The Master Builder* - but because of the exhilaration of the ride he offers. One needs a firm grip to stay seated.

He indicates his line in the first chapter - "Some Fundamentals of Vision and Form in Ibsen". There is, he argues, a constant "openness" in Ibsen's work that is suffused with doubt, the most fundamental, though never utterly destructive kinds - a clash between heroic and mock-heroic, a constant irony of appraisal. Ibsen's work is characterized by its unresolved tensions which elude any simple mode, comic, tragic or even tragicomic. Professor Chamberlain then surveys the work of a wide range of critics from this standpoint.

The main thrust of this premise is, in general terms, reassuring; the application to the selected plays raises some interesting questions. The analysis of *Peer Gynt* is minutely concerned with the structured imagery; it reminds us, valuably, of the series of rides undertaken by Peer - the buck, Grand, the pig, the Steen's horse, (and one might add the mountain of Peer by Begnild at the end of Act 3). But one does find him knee for parts of the ride. For instance, it is argued that in the *Gjerdland* story Peer's separation from the buck is associated by allegorical imagery with the final separation from sheep and goats to which Peer refers in Act 2; that we are invited to wonder whether the buck is merely a malignant troll or Satan himself showing Peer the glory of the earth, whether Peer is really a liar or a poet.

But is there really a clash here? The poem makes it clear that Peer is both. The first line is "Peer, you're lying!" The story turns out to be an old one, as Peer finally agrees: it's a pack of lies. He is a poet, yes, and here the lying and the poetic invention come together. His poem suddenly coalesces when he says the figure, turns and looks at the mountain, and there, very clearly, is the

find him, you can have him!" The episode fuses liar and poet together, shows us a poet who cannot sustain his poetry because his inspiration is false. And if this is, as I believe, the dramatic effect of the scene, I wonder whether the chain of associations that Professor Chamberlain perceives can be said to be invoked.

This is a general point that can be argued through the subsequent analyses. Professor Chamberlain's premise leads him to look for clashes of assessment, to look, in crude terms, for a minus to set against a plus to avoid what he calls univocal interpretation. Hence he judges Solveig to be, perhaps, motivated by some not wholly appealing carnal as well as spiritual desires in her relationship with Peer. After all, he says, she adjusts her garter in front of him. But that tiny detail indicates the difficulty Professor Chamberlain has in mounting his negative case. Solveig does not behave as he says - she uses the garter as an excuse to leave Peer. In *Ghosts* (a play Chamberlain judges to be a failure) a negative case is built up against Mrs. Alving, in part out of her reading. He asks why we aren't told something more about the books that so greatly offend Mander? Professor Chamberlain suggests that perhaps the only free-thinker she read was Georg Brandes; that Ibsen is slyly ridiculing Brandes's ideas and that in consequence we should see both her and Oswald as credulous fools. Professor Chamberlain acknowledges that the evidence for this is sketchy and his joke (as he sees it) as obscurely literary, not dramatic. One must presumably reach one of two conclusions: either that the case cannot stand since the play as a whole does not make the point; or that Ibsen failed as a dramatist.

By and large this is the weakness of the book, that it does not sufficiently take account of the dramatic workings of the plays. There is little sense of the dynamic of dramatic characterization, towards change, development and above all fusion - the all-too-human fusion of opposites, which none the less can lead us, in the end, to a composite assessment of, say, an Antony or a Cleopatra, or a Falstaff or (I would argue) a Hedda, a Peer, a Mrs Alving. But the book is valuable. Professor Chamberlain has a sharp eye, a poet's eye, for imagistic connections and a wide and nimble range of reference, and he argues interestingly and powerfully in ways that genuinely make a reader think and rethink his or her position - not merely on detail but on the criticism of drama.

John Northam

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### Consensus policies

Policy Styles in Western Europe  
edited by Jeremy Richardson  
Allen & Unwin, £15.00  
ISBN 0 04 350062 5

There is a good case for arguing that in recent years the study of public administration has been more radically transformed than that of any other branch of politics. Instead of arid treatises on the powers of local authorities or legalistic tomes on the functions of government departments we now have subtle appraisals of the policy process (including the distinction, in so far as it is one, between formulation and implementation); we have a analysis that the substance of public policy must be considered, in case study form, in order to illuminate the process; and we have increasing awareness that it makes little sense to consider policy-making in "one country", since international comparisons are highly instructive, particularly between countries which are caught up - as most are - in the same web of economic and other interdependencies.

All these qualities are exemplified in the very interesting collection of essays in *Policy Styles in Western Europe* edited by Professor Richardson. The policy process in six coun-

tries - West Germany, Norway, Sweden, the UK, France and the Netherlands - is analysed in chapters by individual experts, who are apparently invited (though not forced) to present their findings in the flexible framework of a "policy style" proposed by the editor. This framework, which is introduced in a chapter by Hans Mayer, is then used by the contributors to more complex ones, defining policy style as "the interaction between the government's approach to problem-solving and (b) the relationship between government and other actors in the policy process".

The former of these variables is a span of preferences between anticipatory or active problem-solving at one extreme, and a purely reactive mode at the other; the second is a range of relationships going from consensus to the imposition of solutions from above. Not surprisingly, most of the national policy processes considered here are marked by preference for reactive problem-solving in practice (despite a self-proclaimed commitment to an anticipatory posture in theory), and by a preference for consensus rather than imposition.

The variations on this theme are, however, very instructive, since they indicate the limits of the proposition that different national systems tend to converge towards a "European policy style". As Peter D. Lyon shows in his perceptive chapter on the Federal Republic, preference for an anticipatory approach to problem-solving is strongly marked there, at least in theory, because of a deep commitment to "rationally" which transcends party differences - though it makes the point that anticipatory planning has been more characteristic of centre-left than of centre-right conditions, both at the federal and at the state levels. In the most important case he describes - that of nuclear energy policy - it appears that the Federal Republic conforms to the usually reactive and consensus-seeking model (though like some other authors he leaves the reader a little uncertainly not making this explicit).

The chapter on British policy-making, by Grant Jordan and the editor, also lays emphasis on the continuity of a national norm (again a reactive and consensus-seeking one), illustrated in part by the limited effects of the present government's campaign against the instruments of consensus by cutting back on quangos.

The chapters on Norway (by a team from the University of Bergen) and on Sweden (by Olaf Ruhn of Stockholm) emphasize the wide range of interest groups consulted in the consensus policy processes of Scandinavia, whereas the Dutch chapter (by Jan van Patten of Amsterdam) places more emphasis on the implications of perennial government by coalition and of the complex structure of the national bureaucracy. Jack Hayward, in his chapter on France, not only defines the "regime" towards an anticipatory position, but also style very neatly in terms of "mobilizing private interests" in the service of public ambitions; he draws attention very pertinently to the complex interrelations between the press, the legislature, and the judiciary of a proclaimed national style, and the very different reality which may underlie the rhetoric.

It is also Professor Hayward who emphasizes a factor which is constantly present, though not always explicit, throughout the book: namely the mounting difficulty for governments to be anticipatory in practice when they are increasingly at the mercy of economic and other pressures from outside their national borders. As Professor van Patten reminds us, it is hard to achieve consensus on a major policy issue when time is short, and this is more and more the situation decision-makers are going to be in. Richardson's thoughtful conclusion ends with the optimistic affirmation that Europe's policy-making systems will develop a learning process to cope with this problem as they have with earlier ones: a proposition which future research, along the lines of this very useful volume, will have to monitor.

Roger Morgan

Dr Morgan is head of the European Centre for Political Studies at the Policy Studies Institute.

# BOOKS

## EUROPEAN STUDIES

### Judaic exile

Franz Kafka's Loneliness  
by Marthe Robert  
translated from the French by Ralph Manheim  
Faber, £12.50  
ISBN 0 571 11945 X  
Outsider: a study in life and letters  
by Hans Mayer  
translated from the German by Denis M. Sweet  
MIT Press, £24.50  
ISBN 0 262 13175 7

In her provocative study Marthe Robert, a leading French authority on Franz Kafka, attempts to locate the roots of Kafka's crippling sense of alienation in his profound ambivalence towards Judaism. The great "Jewish" themes of exile, transgression and atonement are related to Kafka's personal problems as a culturally and spiritually disinherited Jew, bitter at his overbearing father's opportunistic attempts at assimilation and acutely aware of his doubly perilous status as a barely tolerated member of the dominant German minority within a hostile Czech environment.

Robert notes the peculiar discrepancy between Kafka's literary works (where the word Jew never appears) and his diaries, notebooks and letters (where Zionism and antisemitism are constant themes) and deduces a curious case of Freudian repression. Freud has to serve, too, in explaining Kafka's "profound sexual disorder" that is, his Oedipal complex and his consequent inability to marry. None of this is particularly new, and to approach Kafka's work as a kind of arcane autobiography may have its limited uses. But Robert's style is more persuasive than her evidence: too often a paragraph begins with a properly guarded hypothesis only to end with a ringing assertion of "fact". That Kafka's loneliness was connected with intellectual and emotional apathy would hardly be questioned, but the "Jewish" key to the problem - however important - is just one among several.

Nor does the book's second section devoted to the works themselves really substantiate Robert's case. Yet her comments are nevertheless frequently subtle and illuminating. For example, she recognizes that Kafka did not wish to communicate a fixed conception of the world but placed his protagonists in experimental situations which were designed to test both the nature of perception and the chimeric quality of "actual" answers. The texts invite decoding precisely because Kafka puts "meanings" into them only to reject each one as too facile. A single misaligned cog is enough to negate the perfection of every machine.

It is ironic that Robert proves so sensitive to the tantalizing mysteries of Kafka's work while seeking to place him so exclusively in a Judaic-Freudian framework which can only diminish the complexity of a deeply hierarchical individual who found all hierarchical structures ultimately unconvincing.

It is surprising that an archetypal "outsider" like Kafka does not figure in Hans Mayer's impressive study of the phenomenon of For Mayer's thesis, that the bourgeois Enlightenment has disastrously and comprehensively filled was nowhere explored more honestly and rigorously than in Kafka's bleak tales. However, Mayer has read omnivorously and this wide-ranging narrative is the unmistakable product of a truly European mind.

He deals with three major categories of Outsider: women, homosexuals and Jews. The great emancipatory promises held out by the Enlightenment to all three are shown to have been steadily eroded in the nineteenth and twentieth centuries. Mayer's masterly analysis of the varied ways exemplified by individuals reacted to their loss of equality and

liberty, both in historical reality and as mediated in literature, is driven along by a supremely humane sense of outrage. The progressive failure of European civilization to tolerate the unique richness of the awkward individual is linked to the distortions of a male-dominated culture afraid to acknowledge its own essential ambiguities.

The comforting but illusory notion of "deviance" thus illustrates the central mechanism by which society controls women who step beyond their male-defined roles and places homosexuals and Jews permanently at the margin as ready-made scapegoats for all its ills. The ultimate degradation of all three groups in the Third Reich is declared to be the logical development of such attitudes - a conclusion, shared by Sartre among others, which is as troubling as it is difficult to refute or to accept.

The lives of George Sand and George Eliot, Platen and Heine, Rimbaud and Verlaine, Tchaikovsky, Gluck, Proust, the wretched Otto Weininger, Oscar Wilde and Jean Genet, among many others, are compared and contrasted with the products of the literary imagination in

order to clarify and criticize the repressive norms of bourgeois society and the disintegration of the self they can cause. And not only bourgeois society: Trotsky's "Comrade Shlyok" in Mayer's trenchant formulation, is adduced as an example of the outsider both in life and letters who thought he was an insider until it was too late to discover his error.

Mayer's book ends with a sobering chapter on antisemitism since the Holocaust. The contemporary Jew is still confronted with the stark alternative: Auschwitz or Israel. Given the damning and shaming evidence of these pages, it is difficult - though all the more necessary - to argue against such cultural pessimism. For paradoxically Mayer's brave and sane book suggests that in a world where the "insiders" are growing increasingly rigid within their respective ideologies it is perhaps only "outsiders" of any kind who have the courage and possibility to express and embody the crucial need for a new and lasting Enlightenment.

Michael Butler

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### Close reading

Poets of Modern Russia  
by Peter France  
Cambridge University Press, £20.00 and £7.50  
ISBN 0 521 23490 5 and 28000 1

The six chapters that are the meat of this book deal each with a single Russian poet: Blok, Akhmatova, Pasternak, Mandelstam, Tsvetaeva, Mayakovsky. All were born in the late nineteenth century and were active both before and after the Revolution.

The first and last have always been well-known, though the myths surrounding them have tended to obscure the poetry. The central quartet, perceived as such by their last survivor, Akhmatova, in her poem *Four of Us* were grossly underappreciated outside Russia even twenty years ago - but since then have been (particularly Mandelstam) spectacularly resurrected to become subjects of a thriving academic, translating and popularizing industry; Ronald Hingley made them the subject of an admirable collective biography (that is more than just a biography) a year ago in his *Nightingale Fever*.

So what does Peter France bring us that is new and needed? Above all, the presentation of his poets through the close reading of individual works - not the usual potted biographies or general characterizations. The analyses seem to me just right: sensitive attempts to show how individual poems actually work, through their imagery, diction and structure, soberly and lucidly expressed. Particularly interesting are many cross references to French and English (unfortunately not German) literature - seldom obvious, always thought-provoking. France generally keeps away from the more intricate technicalities of phonetics and versification (a consideration of which could well have doubled the volume's length), evidently intending primarily to set up signposts for the discerning but non-specialist reader and a way into unfamiliar and sometimes quite difficult texts.

In this I find him almost totally successful. He may however be over-optimistic in hoping that his analyses will also be accessible to non-readers of Russian. To that end he prints all the poems; he discusses in both languages. His translations generally manage to be both readable and accurate (I'd quibble only about a tendency, common among translators, to render the Russian conjunction *a* - which usually means *and* or *while* - as *but*; nevertheless they remain paraphrases, and add too many significant features of the originals (word-order, for example), are undoubtedly lost for France's close readings to make much sense to English monoglots. Yet with even a minimal quantity of Russian the reader will be helped to enter a new world of poetry. I will remember the

overwhelming impact upon me, some thirty years ago as I was beginning to learn German, of S. S. Prager's *German Lyric Poetry*, a book of rather similar method and sensibility.

Praeger however cast his net wide, following the German lyric through two hundred years. To make up for his narrow focus on a group of coevals, France has an introductory chapter on the tradition they inherited and a concluding one on three living - and very dissimilar - writers. There are good things in both, but they are unavoidably slight in comparison with the main studies. The quiddity of Russian poetry, that which conditioned it linguistically, historically and socially, can't come through in a short introductory chapter, which is moreover occasionally misleading. This matters, since France's six chosen poets, however "modernistic", were saturated in their literary tradition; much, though, is explained piecemeal as we go along. The last chapter tantalizes, opening up perspectives on a vaster field of twentieth-century literature than the six main figures, for all their broad achievements, would have led us to guess at. Like many good short books, this one leaves us wanting more: more poets, for a start (without worrying too much whether they belong to the first or second eleven), and more complete poems - where excerpts are relied upon (notably in the chapter on Mayakovsky) no conception of the "dynamics" of the poem can be conveyed, and France's best skills seem wasted.

Considerations of scope lead to a final point, whose relevance goes beyond this particular volume. Do we, as teachers of literature who rightly prefer close reading to biography or pseudo-sociology in our approach to a poem, unconsciously set up too limiting a hierarchy of taste? Do we miss the wood for the trees? I can't help noticing that most of the work of the six poets here studied is of a certain middle order of complexity, one that somehow seems to suit academic exigencies. Is the by now vast *success d'estime* that these particular poets enjoy in the West at least, a result of their inherent preeminence? We know from experience that some of the most effective poetry can be that which seems extremely simple or imperceptibly obscure: had Peter France turned his skills to, say, Yezhov on the one hand, Aleksandr Vvedensky on the other, the results could have been illuminating. Would the popular balladry, political rhetoric, parody and all form part of the physicality of modern Russian poetry have been amenable to these methods? There's no way to tell, but the question needs pondering.

Robin Milner-Gulland

Robin Milner-Gulland is reader in Russian, at the University of Sussex.

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# BOOKS

EUROPEAN  
STUDIES

## Five-year cycle

The Italian Communist Party 1976-81: on the threshold of government by James Ruscoe  
Macmillan, £15.00  
ISBN 0 333 33399 3

James Ruscoe's book is contemporary history in the manner of Michelet. His aim is to get the reader to see Italian politics from within and to feel directly the texture of a distinctive political culture. He has taken the Communist Party as his main theme, but in effect he has mapped out the whole evolution of Italian politics over a five-year period. Having lived and worked in Italy throughout this period, he is well qualified to convey its intricacies. He is helped by an unflaggingly brisk, almost breathless style that keeps his narrative moving, and prevents the minutiae of Italian political infighting from becoming stifling. Does the period covered in the book (1976-1981) represent any kind of unity? The answer is that it does, but not in the sense that it marks an era of construction and growth. It encapsulates rather the story of a

prospect that never materialized, a prediction that turned out to be completely wrong. The story begins in 1976 with Italy in the grip of a severe economic crisis, and with a general election in which there was a dramatic and unprecedented swing of 7 per cent towards the Communist Party. It seemed at that time as if the Communists, unsullied by any association with the unsuccessful policies of previous decades, were at long last to reap the benefits of their isolation. Their participation in government seemed only a matter of time. The party itself was full of confidence. The policy that its leader Enrico Berlinguer had launched in 1973 of "historic compromise" — basically the offer of a pact with the Christian Democrats — seemed to have the movement of history firmly behind it. Once the Christian Democrats grasped the logic of the situation then surely they would realize that a joint government of "national solidarity" with the Communists was the only way out for them. The extent of Communist confidence is graphically conveyed by the interviews given by a leading party official in 1977 which Ruscoe reproduces in one of his chapters. Five years later, however, the Communists had still not participated in government. Collaboration with the Christian Democrats during the period from 1976 to 1978 had brought them no tangible benefits. By 1979 the policy of "historic compromise" had been abandoned in practice; a year later Berlinguer formally renounced it. Electoral support for the party slumped by 4 per cent in the general election of 1979, and

there were further severe reversals, particularly in the mezzogiorno, in the regional elections of 1981. As 1982 opened the Communists were searching defensively for a strategy and allies. If the initiative lay anywhere in Italy it was now with the rejuvenated Socialist Party under its energetic leader Bettino Craxi. In sum it had become clear that the most significant thing about the election of 1976 had not been the dramatic advance of the Communists, but rather the fact that, even with this advance, they had not been able to draw level with the Christian Democrats. Ruscoe follows the whole cycle of Communist optimism and discomfiture in great detail, highlighting the tactical cunning of Aldo Moro, the naivety and rigidity of Berlinguer, the impact of the terrorism of the Red Brigades, and the reaction of the smaller centre parties to the prospect of an overarching agreement between Communists and Christian Democrats. He also reflects more generally on the structure, finances and philosophy of the Communist Party, injecting what is a fairly well-worn theme with fresh life. As he has deliberately rejected the use of footnotes, Ruscoe's account inevitably has a journalistic appearance, and his hurried, rather excited style tends to overstate things. Unquestionably the opening pages are little more than a melodramatic picturesque designed to whet the reader's appetite and to show him what an exciting place Italy is — rather in the style of the montages that so often precede television documentaries. The substance of the book is by no means journalistic, however, but a serious study based on a wide reading of recent Italian political literature (which is set out in a bibliography) as well as on interviews and of course an intimate familiarity with the Italian press. Judged in terms of its objective, which is to open up the "closed, often baroque, world" of Italian politics, and to give the reader some confidence in moving about within this world, it seems to me eminently successful. It will be of great value to all who wish to understand not only the formal structure but the idiom of Italian political practice.

## GERMANY—

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## French disunity

Philosophy in France today edited by Alan Montefiore  
Cambridge University Press, £20.00 and £5.95  
ISBN 0 521 22838 7 and 29673 0

In my university bookshop copies of the works of contemporary French philosophers are normally to be found on the shelves devoted to English literature, not in the philosophy section. This represents an interesting situation: it is teachers of English who quote Derrida, while philosophers in this country tend to dismiss him and his fellows as both obscure and pretentious, as not really to be classified as writing philosophy. The situation is perhaps not unlike that of Sartre some twenty-five years ago. Then, and now, established English philosophers suggest that the appeal of the French thinkers is to those who have a philosophical sophistication, or who are merely impressed by high-sounding language. Consequently they feel no obligation to study what is being written on the other side of the Channel. Yet teachers of literature obviously find these writings exciting and helpful in their work: it is doubtful if they would find the same inspirations from a study of what is at present being written by English philosophers. One obvious reason is that there is where is a close connection between philosophy and literature. More important, perhaps, is the fact that the French seem to raise in the sharpest possible way the question of what a work of literature is. As well as it must be added to raising the



George Feydeau, a picture taken from Feydeau, First to Last: eight one-act comedies (Cornell University Press, £15.00).

question about philosophy itself. It is true that some English philosophers make use of literature in their writings, but they tend to treat the literary text as if it were quite impractical. The same may be said of their attitude to philosophy. Yet the so-called "analytic" movement was born from a questioning about the nature of philosophy: it now seems to have become somewhat complacent and insular. Reading the journals there is an impression that Anglo-Saxon philosophers live by taking in each other's interpretations and arguments. Perhaps we again need an injection of new ideas from Europe.

These remarks are relevant to Alan Montefiore's useful collection of writings by French philosophers, for there is a danger that it will be neglected by those who must need to ponder its contents, which are diverse both in style and in what is said. The editor asked all the contributors to say what they understood to be the nature of their own work, the context and audience for them, and what non-French readers might find difficult in them. I am, Paul Ricoeur and Jacques Bouveresse respond directly to the questions, and in a manner that we would expect. The difference between the collection and a somewhat similar one recently published in France of English-speaking philosophers writing for a French audience is remarkable. The latter had a degree of unity. Though the contributors expressed a variety of views, they shared a style and a conception of the nature of philosophy. For the French it would seem that there is no common set of philosophical problems they share only the belief that philosophy itself is problematic.

The editor himself is at pains to emphasize the diversity, and he is clearly right to do so. There is no common basis, and even the suspicion of the subject of philosophy itself differ in significant ways. Some contributors challenge the possibility of answering questions of the kind asked by the editor. Any unprejudiced reader will be struck by this feature, and I think, be forced to agree that I do not overemphasize the unity of "analytic" philosophy in comparison to that current in France today.

Montefiore's excellent introduction provides a philosophical survey of the background to the articles, setting out their context and drawing English connections with contemporary French thought. But he does not fall into the trap of trying to reduce their concerns to ours: it is the best short introduction to contemporary French philosophy that I know in English. The weakest of the individual pieces is that by Derrida, which was not written for the volume and seems merely self-indulgent. It might have been better omitted.

Anthony Manier  
Anthony Manier is professor of philosophy at the University of Southampton.

## Catalan Romance

Curial and Guelfa translated from the Catalan by Pamela Waley  
Allen & Unwin, 19.95  
ISBN 0 04 82217 4

This example of the early modern European novel brings to the English reader one of the two romances — the other being the more famous *Tirant lo blanc* by Martorell, from the fifteenth century — which make up the Catalan contribution to the romance of chivalry. Written some time between 1460 and 1461, it exists in a unique manuscript, which has neither a title-page (its usual title coming from the names of its hero and heroine) nor a known author. The fifteenth century saw a continuing vogue for Arthurian romance with the appearance of such new works as Malory's *Morte d'Arthur*, Antoine de Sale's *Le roman de la Rose*, and the most celebrated of all, the Castilian *Amadís de Gaula* of Montalvo, which became one of fiction's first bestsellers and which had a European fame until the age of Romanticism.

*Curial and Guelfa*, in three books, has many features common to the genre. First it is a leisurely narrative of aristocratic and royal society depicting scenes of great luxury and feasting and other gatherings as well as many combats in the lists. It tells the story of a young man of humble origins adopted by the Marquis of Montfort and later the protégé of his widowed sister Guelfa, with whom he falls deeply in love. Curial, a most handsome and gifted young man, becomes an invincible knight who fights for the wronged and the weak and dedicates his deeds to his lady. His adventures, as with other romances, take him to Italy, France, England, Germany, North Africa, Greece and the Holy Land, but not to Spain, although the King of Aragon is one of the novel's characters, as are several dukes and archbishops. The simple, unadorned thread of the plot is the apprenticeship of the hero for the love of Guelfa whom at the very end he marries.

As with other such tales, there is here much analysis of the agonies and the joys of love, articulated by the frequent use of monologues and short speeches (rather than true dialogue), with the narrative moving along thanks to such well-used devices as the curtailing of details to avoid boredom. The overall picture of these creatures of privilege includes scenes of erotic emphasis, although religion and religious practice again pervade in justification of their activities. The novel also includes some of the pagan gods who take an interest in Curial's progress and whom he visits in Transylvania. These episodes and the hero's visit to Rome for its monuments and antiquity contacts with classical antiquity mark the romance as a product of the Renaissance as well as a survival of medieval tastes.

Where *Curial and Guelfa* differs from most romances of chivalry is in the more naturalistic presentation of character and background and the consequent absence of monsters or magic, thus recalling Cervantes' *Tirant*, namely that its knights sleep and die in their beds. Another feature of both Catalan novels is the presence of humour in the narrative. While it of course reflects the aristocratic obsession of the 1400s for chivalry and its trappings, the *Curial and Guelfa* must also be seen as voicing the criticism of this ancient order which was coming to be seen, as wasteful, even as Castilian tastes.

Dr Waley has given a very readable version of the romance which is also faithful to the original. She brings the varied panorama alive and keeps the story moving. Her page introduction, however, might have been usefully expanded to place the novel in its Hispanic and European contexts.

#### Frank Pierce

Frank Pierce is emeritus professor of Spanish at the University of Sheffield.

# BOOKS

EUROPEAN  
STUDIES

## Poetry as 'the word in time'

Antonio Machado: selected poems translated by Alan S. Trueblood  
Harvard University Press, £17.50  
ISBN 0 674 04065 1

Antonio Machado is rightly regarded as one of Spain's great twentieth-century poets. In this book of parallel text translations of a selection of Machado's verse, Professor Alan Trueblood begins his preface with the provocative and enlightening collection of how, in 1966, a homage to the poet was organized to take place in Baeza, where he lived from 1912 to 1919. When it was realized that there would be a considerable public response, the Franco regime prohibited the event. Despite the fact that he had died in exile in 1939, and his work had been officially ignored for 25 years, Machado had been a staunch republican and a democrat; the risk was still too great to be acceptable.

A year later the homage did take place, but under the auspices of Brown University and in Providence, Rhode Island. It was for this occasion that Professor Trueblood translated a handful of Machado's poems, and the experience convinced him that the poet's work should be more fully available to English-speaking readers. The publication, fifteen years later, of this volume amply justifies his initial conviction and intervening labours.

Machado's poetry has many admirable qualities. Emotionally strong yet restrained in expression, replete with a deep feeling for the Spanish countryside, there are large tracts which do, in the hands of a sensitive and skilled translator, lend themselves to English versions which stand by themselves without losing the authentic voice of the poet. To create such versions has been Professor Trueblood's aim throughout. But the poems also have other complexities, many of which are likely to deny any viable translation that is not based upon a deep textual understanding. Happily, Professor Trueblood (the occasional idiosyncratic rendering apart) has been equal to both the artistic and scholarly challenge that he has set himself, while producing at the same time an anthology eminently representative of the best of Machado's poetry across the full span of his career. The 64 poems chosen for translation contain seven not included by Machado himself in the various editions of his *Complete Poems*, among them the moving tribute to Federico Garcia Lorca entitled "The Crime was in Granada".

Machado is perhaps best known for the poetry of the earlier part of his career, especially where in the collection *The Castilian Country* (1912) he seems to be searching for the soul of Spain amid the harsh dignity and grandeur of the landscape of Old Castile with its unchanging peasantry. Inevitably, perhaps, it is in these often lengthy, reflective works, such as "Along the Duero", "The Soris Country", and "A Day", that the translator's art is at its best effect. But the full picture is rather more complicated, and is explored not only in the translations but also in Professor Trueblood's very substantial introduction. Mirroring the complexity of its subject matter, this is not always an easy work to read as it charts the various strands of Machado's intellectual and artistic development, while providing many insights into the interpretation of the individual poems. This is expanded by the often very full and illuminating notes with which the translator has furnished the text. The movement described leads from post-Romantic solipsism towards a more objective awareness

of the world; away from a search for the inner self towards an effort to embrace the "otherness" of the universe; from a vision preoccupied with intuition and dreams to one which rests upon waking observation.

With the death of his young wife after only two years of marriage, Machado moved from Soria in Castile, which had inspired much of *The Castilian Country*, to Baeza in the north of his native Andalusia. There his penchant for metaphysical and philosophical speculation began to grow, and he settled into the solitary pattern of life, both as a man and an artist, which he was to lead thereafter. The experience was to throw into relief his longing for a religious faith which he was unable to feel, and the conviction that love was an emotion only tenuously possible in the absence of the beloved. Yet throughout his work, the temporal context always formed the cornerstone of Machado's aesthetic — he it was who defined poetry as "the word in time" — and his awareness of time's power over man's existence, his memory and the arbitrary and deceptive selection by the mind from memory's hoard of recollections, the transfer of past sensations and ex-

perience to a present where poetry captures and freezes them, is always apparent. This awareness he expresses in a variety of symbols, invariably connected with the timeless, unchanging flow of water, rivers and fountains. The heterodoxy of the ideas which the poems reflect means that the reader's progress through Professor Trueblood's introduction is at times uneven and shifting, finding and losing the thread of continuity as the essay follows the twists and turns, reversions to the past and premonitory glimpses of the future, which Machado's verse displayed over a period of nearly forty years. But on balance, especially if it is agreed that translation is also a form of exegesis, and criticism, few books will offer a better preparation to the reader who wishes to make the acquaintance of Machado, and those who have already done so may be grateful for the assistance they will derive in understanding the poet's less accessible verses.

R. K. Britton

R. K. Britton is registrar of the Northern College, Barnsley.

## Grammar in practice

A German Reference Grammar by Robin Hammond  
Oxford University Press, £3.50  
ISBN 0 19 912048 X

Cars are sometimes recalled by manufacturers for repair under warranty; perhaps publishers should provide a similar service. This review of Robin Hammond's *A German Reference Grammar* is based on the experience of using the text to teach first-year university students of German. It is addressed particularly to those teachers who may consider introducing it in the sixth-form and university courses for which it was designed.

Hammond's lay-out is reassuringly traditional. There are headings such as "conjugation of verbs" and "declension of adjectives"; there are plenty of examples of current German usage with English translations, and there is even a glossary of traditional grammatical terms. Despite its modest size and relatively modest price it may appear to be a successor to F. J. Stopp's *A Manual of Modern German* and A. E. Hammer's *German Grammar and Usage*. But it is not — in fact it throws down a challenge to that succession.

Hammond seems to believe that much of the German taught in this country is not the German used in Germany today. He is certainly right to examine school German from the perspective of current German usage. However, sharp-eyed pupils and students will want to know why he includes such sentences as "Wir fliegen in die Schweiz im kommenden Jahr" (para. 29) and "Sie hat seit fünf Jahren hier gewohnt" (para. 43). Perhaps Hammond today do not arrange their adverbial phrases in the halfhearted order of the English classroom: "time, manner, place" and perhaps the German who says, on his visit to England "I am here since two days" is not necessarily translating word for word from his own language, but if this is indeed so, then it is precisely the kind of thing that needs to be explained to A level candidates and students.

Many of Hammond's explanations belie the traditional framework of the text as a whole. Is it true that the verb "sein" in the sentence "Das Eis ist nach Süden getrieben" has formed "a kind of passive with the verb sein as the auxiliary instead of the verb werden" (para. 66)? Surely it is more economical, and less confusing to readers, to see this as an example of the active, but intransitive, use of the same verb meaning "to push" or "to drive"; but "to push" is there any advantage here in drifting? It is there any advantage in the interpretation of the individual poems. This is expanded by the often very full and illuminating notes with which the translator has furnished the text. The movement described leads from post-Romantic solipsism towards a more objective awareness

*Vorstizende* and "der Alte" and then say "The plural form 'end' in -n or -en" (para. 154). This will only work if the reader is not tempted to generate from this instruction nominative and accusative plurals like "einige Vorstizenden" (sic) for "some chairmen" or "viele Abgeordneten" (sic) for "many deputies", which some will doubtless do. I am sure that it is valuable to break out of the straitjacket of convention occasionally, but the majority of those who read this grammar will have been carefully strapped into that convention by teachers trying to help them avoid making mistakes that even German would recognize as mistakes. It would have been better to produce a longer book to supply more detailed explanations, more argument and more evidence.

Experienced readers will be confused by many statements that are ambiguous or misleading. We are told, for instance: "The present tense in German is used . . . for an activity which is taking place in the immediate future, and where the timing is clear to the speakers" (para. 29). The "and" in this sentence leads to potential confusion: are both conditions to be met in each case, or merely either the one or the other? Since one reading of this rule is that both conditions are to be fulfilled, a sentence like "Nächstes Jahr fahren wir in die Schweiz", which does not refer to the immediate future would have to be discarded even though it is authentic. Ambiguities of this kind have no place in any grammar let alone one designed for the inexperienced reader.

The text contains numerous mistakes: "möchte" is given as an example of the present subjunctive (para. 69); "Gibst es keine andere Lösung" is rendered "Could it be that there was no other solution?" instead of (para. 71) the abbreviation "I" for "jemanden" leads to the formation of such phrases as "sich befehlen, sich befehlen" (sic) (para. 80); "Er hat die Gäste willkommen", which is offered as an example of the use of the infinitive without "zu", contains no infinitive since "willkommen" is an adjective (para. 107).

These and other mistakes can readily be corrected by the author; however, to make the text as a whole a dependable reference grammar for use in schools and universities, major rewriting is necessary.

#### Philip Payne

Philip Payne is lecturer in German studies at the University of Lancaster.

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For your own comfort and convenience, the Department has a number of holiday homes available for rent during the summer months. These are situated in the beautiful Devonian coast and are well equipped with all modern amenities. For further details and to book, please contact the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth, PL4 8AA.

## Personal

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## Colleges of Higher Education

West Glamorgan  
Institute of  
Higher Education

Athrofa Gorllewin Morgannwg  
Senior Lecturer: Illustration

Applications are invited from suitably qualified candidates to be responsible for DATEC Diploma and Higher Diploma courses in Technical Illustration. The successful applicants should have graduate/professional qualifications and have the ability to manage a small team of specialist lecturers. He/she should also have a wide range of practical experience, and a lecturing background would be an advantage.

## Lecturer I: Illustration

Applications are invited from suitably qualified and professionally experienced illustrators to teach on a wide range of courses, in particular on the proposed DATEC Higher Diploma in Illustration with Graphics. The successful candidate will have the opportunity to work in a new and developing field. Teaching experience will be an advantage.

Lecturer II: Nursing Studies  
(Temporary for 3 years)

Applications are invited from suitably qualified and experienced Nurse Tutors to become Course Tutor for the Diploma in Nursing (validated by the University of Wales). The course is offered jointly with the Schools of Nursing in West Glamorgan and neighbouring Authorities and the successful candidate will have a peripatetic role to maintain liaison with all agencies. The person appointed will also be expected to teach on nursing theory and practice. A degree qualification would be an advantage.

Application forms and further details are available from the Principal, West Glamorgan Institute of Higher Education, Townhill Road, Swansea, SA2 0UT  
Closing date for applications: 11th March, 1983.

The Governing Council seeks to appoint a  
**DIRECTOR**  
to take up post as soon as possible.

The present Director, John Stoddart, has been appointed Principal of Sheffield City Polytechnic. Humberside College (currently Group 10) is a major regional and national institution of higher education with 3,000 full-time and sandwich students and 4,000 part-time students.

The college offers a diverse range of courses and its academic programme includes 23 degree and post-graduate courses, with a further 10 degree programmes planned to start this September, together with a wide range of diploma and professional courses.

The three major sites of the college are in Hull, but the development of a fourth major location in Grimsby is under way.

Further details of the post may be obtained from: Mr. D. A. N. Robertson, Clerk to the Governing Council, Humberside College of Higher Education, Cottingham Road, Hull HU8 7RT. Telephone: Hull (0482) 41451.

Letters of application with the names and addresses of two referees should reach the Clerk by 22 March 1983.

HUMBERSIDE COLLEGE  
of Higher EducationEDGE HILL COLLEGE OF  
HIGHER EDUCATION

An Associate College of the University of Lancaster  
Applications are invited for the following posts to be filled from 1st September, 1983:

**LECTURER II OR SENIOR LECTURER IN READING AND LANGUAGE STUDIES**  
To teach on BA and BSc degrees in English and American Studies.

**LECTURER I IN ENGLISH LITERATURE**  
To teach on BA and BSc degrees in English and American Studies.

**LECTURER II OR SENIOR LECTURER IN MATHEMATICS AND COMPUTER EDUCATION**  
To teach on BA and BSc degrees in Mathematics and Computer Science.

Further details and application forms may be obtained from the Personnel Officer, Edge Hill College, 100-102, Edge Hill Road, Liverpool L6 9AT. Telephone: Liverpool (0151) 275 1234.

Roehampton  
Institute

Digby Stuart  
Prosser  
Southlands  
Whitehills

Course offered by the Roehampton Institute of Higher Education are combined studies leading to university first and higher degrees. The Institute seeks to make the following appointment in the DEPARTMENT OF HOME ECONOMICS not later than 1st September, 1983.

PRINCIPAL LECTURER  
IN CONSUMER &  
MANAGEMENT STUDIES

Applicants should be well qualified academically and also have at least two of the following industrial, commercial, teaching or research experience relevant to Food, Textiles and Home Technology. Salary £11,931-£15,018 plus London Allowance £834 per annum. Further particulars and application forms may be obtained from:

R. A. Farnell, Assistant Secretary, Roehampton Institute of Higher Education, Richardson Building, Digby Stuart College, Roehampton Lane, London SW16 5PH.  
Closing date for applications: Monday 21st March, 1983.  
(This is a re-advertisement and earlier applications will automatically be reconsidered)

## Colleges and Departments of Art

RICHMOND UPON THAMES - EDUCATION COMMITTEE  
RICHMOND UPON THAMES COLLEGEAppointment of  
Dean of Arts

This exciting new appointment in London's first tertiary college offers an opportunity to lead three teaching teams - General Art and Design, Communication Design, and Drama, Physical Education and Music - in the development of courses suited to the needs of 16 to 19 year olds and a significant number of post-18 year olds. Curriculum responsibility includes DATEC, Higher DATEC, GCE 'O' and 'A', CEE, and a programme of Creative Studies.

The Dean of Arts is one of four senior staff responsible for course-planning, teaching and resources. The others are Deans of Business Studies and Humanities, Technology, and General Education. Oversight of student progress and development, both academic and personal, is in the hands of five Heads of College.

When an appropriate vacancy occurs, the Dean of Arts will be expected to assume the Headship of a subject-team in Higher School of Studies.

Deans of Studies will be paid on the salary scale for Heads of Departments, Grade V, currently £14,679 to £16,305. In addition, this post carries the Outer London Allowance of £816 per annum.

Application forms (foolscap s.a.e.) available from the Director of Education, Regal House, London Road, Twickenham, Middlesex TW1 3QB, returnable by 18th March, 1983.

This is a re-advertisement. Previous applicants will be re-considered automatically.

City of Salford  
Salford College of  
Technology

Department of Art and  
Industrial Design  
**LECTURER (GRADE II) IN EXHIBITION DESIGN**

To contribute to a programme of Exhibition Design, including the design and production of exhibition materials, including the design and production of exhibition materials, including the design and production of exhibition materials.

Salary Scale: £6,455 - £11,023 p.a.

Applicants should be graduates and/or possess relevant professional qualifications.

Further details and application forms may be obtained from the Personnel Officer, Salford College of Technology, 100-102, Salford Road, Salford, Greater Manchester M6 6PU. Telephone: Salford (0161) 841 1111.

Inner London  
Education Authority  
Central School of Art  
and Design

**LECTURER I OR SENIOR LECTURER IN READING AND LANGUAGE STUDIES**

To teach on BA and BSc degrees in English and American Studies.

**LECTURER II OR SENIOR LECTURER IN MATHEMATICS AND COMPUTER EDUCATION**

To teach on BA and BSc degrees in Mathematics and Computer Science.

Further details and application forms may be obtained from the Personnel Officer, Inner London Education Authority, 100-102, Inner London Road, London EC1A 3BB. Telephone: London (0171) 253 1234.

## Scholarships

University of  
London  
Edmund Davis  
Scholarship in  
Medicine, Law or  
Engineering

Applications are invited from suitably qualified graduates of any University for the award of the Edmund Davis Scholarship for the year 1983-1984. The award is made to a student who has achieved a high standard in his or her undergraduate studies and who is recommended by the University of London.

The Scholarship is awarded to a student who has achieved a high standard in his or her undergraduate studies and who is recommended by the University of London.

Further details and application forms may be obtained from the Secretary, Edmund Davis Scholarship, 100-102, Inner London Road, London EC1A 3BB. Telephone: London (0171) 253 1234.

## Colleges of Further Education

SURREY  
COUNTY COUNCILNORTH EAST SURREY COLLEGE OF  
TECHNOLOGY  
Reigate Road, Ewell, Epsom,  
Surrey KT17 3DS

Applications are invited for the following post to be filled as soon as possible:

Head of Department of  
Construction Studies  
Grade VI Department

This post is a re-advertisement. All previous applications will be automatically reconsidered.

The successful applicant will possess a good honours degree of a British University or an equivalent qualification and will have had substantial experience of teaching in further education.

Salary Scale: In accordance with the latest Burnham Scale for teachers in establishments of Further Education. Plus £246 p.a. London Fringe Allowance. Generous relocation expenses in approved cases.

A stamped addressed envelope please for further particulars and application form from the Vice-Principal.

BOURNEMOUTH AND POOLE  
COLLEGE OF  
FURTHER EDUCATIONSENIOR LECTURER IN  
MICROCOMPUTER  
APPLICATIONS  
(£7 3076)

Applications are invited for this post with a view to the appointment taking effect as soon as possible.

Applicants should be well qualified with both academic and appropriate industrial/commercial experience and have a proven record of innovative course development.

Salary - Senior Lecturer: £10,173-£11,964 (Bar) - £12,615 p.a.

Further details and application forms available from the Principal's Secretary, North Road, Parkstone, Poole, Tel: 0202-747900. Completed forms to be returned within 2 weeks of the date of this advertisement.

Bournemouth and Poole College of Further Education is an equal opportunities employer.

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## Administration

## Department of Education &amp; Science

HM Inspectors of Schools  
Youth Service

Applications are invited from women and men, preferably aged between 35 and 45 with extensive experience of youth work and relevant professional or academic training. Experience in both statutory and voluntary sectors or in youth work training would be an advantage. All HM Inspectors undertake general duties as well as specialist work and candidates should therefore have a broad interest in either Schools or Higher and Further Education.

Starting salary within the range £13,840-£19,830 (up to £12,220 Higher in London). Promotion prospects.

Applications forms (to be returned by 8th April, 1983) and further information may be obtained from Mr. E. D. Foster, Department of Education and Science, Room 16/17, Elizabeth House, 39 York Road, London SE1 7PH. Tel: 01-928 9222. Ext. 2257 or 2785. Please quote 1/83.

**REMINDER**  
Copy for  
Classified Ads in the  
THES  
should arrive not later than  
10a.m. Monday  
preceding publication

Research Officer  
(Education)

(£11,205-£12,318 p.a. inc.)

Ref: A177/G218/TBE

Hackney is an inner city area facing social and economic deprivation, and the Council is committed to fighting the related problems of racial and sexual discrimination, unemployment, poverty and poor housing, problems which are particularly severe for young people in the Borough.

As part of the programme to tackle these issues Hackney Council has set up an Education Sub-Committee to consider, monitor and review education matters. The Committee works in close liaison with the Inner London Education Authority with whom there are regular liaison meetings, and with the Manpower Services Commission and other contributory organisations.

We are looking for a committed individual able to constructively support this committee and to liaise with the service providing organisations. Such a person is likely to have had some experience in research and liaison in education. Experience in other areas also of social policy would be desirable as the person appointed will also be expected to contribute to policy development in fields other than education.

The person appointed will work in close consultation with members and will be located in the Research and Intelligence Unit of the Chief Executive's Office which is concerned with the development of policy in related fields. Job sharing facilities are available.

Application forms are available from John Penney, Head of Personnel Services, Town Hall, Mare Street, E2 1EA or telephone 01-986 7539 (24 hour answering service) quoting reference.

Closing date 18th March, 1983.



We would positively welcome applications from black people, disabled people and women.

Hackney - a radical, socialist Borough

University of  
Leicester

Research and Services Office  
**ADMINISTRATIVE  
ASSISTANT**

Applications are invited for the post of Administrative Assistant, which is principally concerned with the preparation of estimates, recording and analysis of expenditure, monitoring of research consumption and the preparation of accounts and other records and costs.

Applicants should be qualified or experienced in the use of the computer and have a good knowledge of accounting and statistics.

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Oxford Polytechnic  
CONFERENCE AND  
LECTURES  
ORGANISER

(Salary scale £11,655 - £15,018 p.a.)

This new post has been established to promote and develop the use of the Polytechnic's facilities for conferences and other revenue-producing activities. The successful candidate will be responsible for the organisation of conferences, with a view to the development of the Polytechnic's facilities for conferences and other revenue-producing activities.

Applicants should be qualified or experienced in the use of the computer and have a good knowledge of accounting and statistics.

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THE FURTHER EDUCATION  
STAFF COLLEGE  
RESEARCH  
OFFICER

To work on a research project on LOCAL AUTHORITY INVOLVEMENT IN THE NEW YOUTH TRAINING SCHEME.

The Research Officer will be expected to make a major contribution to all aspects of the project, including interviewing, data collection, analysis, and the writing of reports for publication.

It is a temporary post lasting eighteen months, to begin on the 1st April 1983 or as soon as possible thereafter. The post is full-time, although a part-time appointment may be possible.

The appointment will be on the first three points of the Burnham Senior Lecturer scale (£10,173, £10,593, £11,023).

Further details are available from the Research Officer, Further Education Staff College, Combe Lodge, Blagdon, Bristol BS18 6RG. Tel: 0761-62503. Informal enquiries to Bob Challs at the Staff College.

Bristol Polytechnic  
Department of Computer  
Studies and Mathematics

**RESEARCH  
ASSISTANT/  
RESEARCH  
ASSOCIATE**  
Ref No R/102

Applications are invited for the above post. Candidates should be graduates of a recognised university with a degree in a relevant discipline.

The post will be full-time, although a part-time appointment may be possible. The appointment will be on the first three points of the Burnham Senior Lecturer scale (£10,173, £10,593, £11,023).

Further details are available from the Research Officer, Further Education Staff College, Combe Lodge, Blagdon, Bristol BS18 6RG. Tel: 0761-62503. Informal enquiries to Bob Challs at the Staff College.

Experience of Cobol or IMS equipment would be an advantage. The successful candidate will be expected to make a major contribution to all aspects of the project, including interviewing, data collection, analysis, and the writing of reports for publication.

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# Don's diary

## Monday

Went shopping in town today - small items which were really only an excuse. I have recently rediscovered the pleasures of walking in a city. When I was teaching I hated the noise of city traffic and looked to the countryside for peace and relaxation. Now I have perfect peace every morning while I sit at my desk in the bay window of our front room and look out on a quiet suburban street.

Going to town gives me the chance to mingle with, observe, and draw conclusions about the busy world. I also have time to admire the endless variety of architectural detail in the buildings of this Victorian city. Most importantly I enjoy that sense of perfect wellbeing which comes from being able to saunter while others, poor fellow human beings, must rush as I once did.

All these delightful activities came to an abrupt end for today when I pulled a muscle in my leg while negotiating a busy pedestrian crossing. So I hobbled and lurched my way back to the bus station, feeling like Quasimodo and wondering how I was going to present myself at the interview, later in the week, for a part-time job with an educational publisher.

## Tuesday

An ordinary day at home. My wife takes the car this morning so by ten past eight I'm at my desk, the lamp switched on because it's still dark outside. The rain is lashing against the window and I feel almost guiltily snug.

I'm working this morning on my family history. I can't remember how this interest began but it was after I was pensioned off and I'm sure, very psychological. Yet I've derived great benefit as well as pleasure from it. Ridiculous though it may sound in a knowledge-laden age, you can benefit from reflecting upon a few scraps of information about the lives of long dead people whom you have never known. The work has also presented a variety of challenges. Getting information from parish registers is not always easy, and sometimes not very informative when achieved. In writing up your discoveries then is the question of the form to be adopted. My wife has been to produce a readable narrative, and I think I've had some success so far. But it's difficult when the available material is thin and conjecture inevitable.

In the afternoon I hobble into the garden for vegetables with which I make soup. Then do other domestic chores until my wife returns from school at 4.30. My younger daughter, who is unemployed at the moment and living at home until she joins the police at the end of the month, cooks the main course of the evening meal. Afterwards some quiet reading and a bit of television. To bed by 10.30.

## Wednesday

Put on a smart suit and am driven by my wife to the university building where I am to meet my interviewers. I have been told that a teachers' conference is taking place there and that I should go to the information desk. I assume I will then be told the room in which the interview is to take place. But there is no message for me.

At last I notice that someone is now standing by the desk and glancing questioningly at his watch and me. I approach him, trying to pretend that my limp is only my usual way of twisting and winding through a crowded foyer. It is my interviewer, and it becomes clear that he has not booked a room. More hobbling about until we decide that we can talk at the back of an empty lecture theatre.

We do so, standing, and I feel that he doubts my "resilience" (is it the

limp?) to visit schools day after day, extracting requests for inspection copies from harassed and uninterested teachers. He's probably right, but I shall try again for this kind of job.

## Thursday

Another uneventful day at home.

## Friday

My older daughter telephones for her weekly chat. She has been given a beta treble plus for her last assignment, which invited her to discuss in French the proposition that man is a feeling rather than a rational being. Her tutor's comment was that the French was very good but the content a bit thin. My views about how we ought to be directing the energies of our more able teenagers have changed considerably as I've grown older, and watched my own children going through a system of which I'm no longer a part.

Life in and around the city in which my daughter presently lives seems to be a charmed (as well as charming) one in other ways too. She tells me that while she's there it's difficult to remember that the country is in the middle of a depression. This is entirely in tune with my own observations made on my last visit to her. It is all the more ironic because the region is traditionally one of the most underprivileged in the country. I suppose one can at least say that our educational institutions bring very tangible benefits to their immediate environments. As to the long-term benefits to their students, one needs a kind of educational faith in order to acknowledge their reality.

## Saturday

Family past-gives way to family present. My son and daughter-in-law are coming to stay for a few days. They are arts graduates and have very good top seconds have had little to do with their obtaining work as assistant managers for a well-known restaurant chain. They've been doing this work for over a year now and I don't think they can take much more of it. The hours of work are such that one feels there should be some way of taking the company to the European Court of Human Rights. Both are applying for other jobs, and each has at least one interview. We hope and pray, and take each day as it comes.

## Sunday

Go to church where I am told about man's tendency, in religion as in other things, either to look back to "the good old days" (eg before the changes of Vatican II) or to the future (Heaven) for security and happiness. It's suggested that the Kingdom is already here for those who (again) have the eyes of faith. I know it's true, but it's hard to live more than momentarily.

I still need my family history and my gardening, and it's a fine day I spend some time in the greenhouse tidying and disinfecting in preparation for the year ahead. I've saved my usual share of set-backs - ground plants, wrenched out of the ground by gales, peas which begin to shrivel before the whole crop has been picked, and brassicas stricken by cabbage root fly.

But one of the more certain things in an uncertain world is that, despite all these natural disasters, I shall, God willing, once more produce the finest crop of vegetables for the next 12 months. This gives me a deep satisfaction, as well as a variety of culinary delights not otherwise available. And that can't be bad.

C. W. McPhee

The author was head of the faculty of arts at Sedley Park College of Education until its closure in 1980.

## God save us and buildings from thinkers



Patrick Nuttgens

do not have specific functions to a philosopher. How interesting it must be in any institution (or loony-bin) where Scruton is to be found! Full of lectures and writers with their trousers over their head on one day, and their gloves round their toes on another, and their socks on their ears and hats tied over the front of their faces so that they can talk through a hole in it.

The point of Scruton's argument is that, since buildings do not have specific functions, architects are unnecessary. He writes: "We must begin by destroying the illusion that architects are necessary. They are as dispensable as dress designers, and as dangerous." He has something there. We can do without dress designers and we can do without some architects. The problem is to know who the real architects or dress designers are, especially if we make our own.

You can tell that I have been stimulated by Scruton's attack and by its originality. He finds that the classical tradition, which he loves, denotes "flexibility, multiplicity, ornament and moulding. It concerns not the whole, but the part, and the whole is derived from the part". With that, but what would Alberti, the great theorist and architect of the Renaissance, have thought of it, with his plans for centralized churches and his well-known mathematical definition, based on Vitruvius, that beauty

consists in a rational integration of the proportions of all the parts of a building in such a way that nothing could be added or taken away without destroying the harmony of the whole? How astonished Patrick would have been when designing Villa Capra if he had been told that it simply derived from its point of origin, the design of the Parthenon. It always amuses me when you know generalizations when you know less about the subject.

Bernard Levin had a bit of architects a few weeks later when he was provoked by an architect's proposal that there should be an elevated roadway along Oxford Street. It consoles himself, as I imagine many of us do, by the thought that things will never be built, though Ford Street as it is now.

Fortunately Levin is being limp. Or I think he is. Or perhaps I think he is. He admits the six buildings. Or at least I think he does. Battersea Power Station is "both beautiful and undated," says. I hope he doesn't mean that it might have been built at any period in history, because it looks fairly dateable to me and there have been many other periods when power stations were major monuments.

It used to be regarded as an eyesore by people other than architects, but have usually had a soft spot for it, but I cannot quite bring myself to think of it as beautiful. Dramatic, powerful, evocative, handsome, strong. Yes. But beautiful?

But it doesn't matter, because what Levin really wants is central London is a row of cottages in Cotswold stone, and thatched. Put all Cotswold characters, with smocks and sickles. Or, to bring the Cotswolds more up to date, full of businessmen or commuters belted because they really wanted to be in Birmingham. But it's lovely like. Perhaps the cottages could be full of Times journalists all writing longhand and waiting for the post.

Where Levin has a good point is where he talks of architects waiting to tear down every building in the country and put them up again side-out, upside-down and back-to-front. Whether or not the architects want to do that to all buildings, the description does make some important points about the nature of architecture. The development of technology and a new vision of space have between them meant that many modern buildings are precisely side-out, upside-down and back-to-front, like the Pompidou Centre. But that's another story.

## LETTERS TO THE EDITOR

### Galbraith's disservice to the arts - and to himself

Sir, - John Kenneth Galbraith, in his article "The Artist and the Economist: why the two must meet" (THESE, February 18), has done both the arts and himself a disservice. His reasons for attaching importance to the arts, to arts education and to the arts themselves seem mundane if not naïf. If his arguments were to be accepted as the basis for a justification of the continuance of arts education, the arts might be weakened rather than strengthened as a result. Professor Galbraith points to three areas in which the arts might be more important than appearances suggest. He points out that paintings and sculpture can be currency in themselves - that fuddy-duddy museum keepers might outpace economic experts by acquiring works which increase in value dramatically. Secondly, he suggests that because affluent societies generally support the arts, we should pay more attention to the arts in order to convince ourselves that society is affluent! This is like saying a good cake gener-

ally has icing. Therefore, when we spot some icing, we can assume that some good cake lies beneath. Finally, he points out that tasteful design makes money and he cites the Italian car industry as an example.

Though Professor Galbraith does not say that these are the only justifications for the arts, he implies it, if only because he omits to point to any other reason for their presence. The flaw in his reasoning stems from an apparent assumption that economic health represents the pinnacle of human endeavour. Though professional designers and others have always made contributions towards a rich living, the core of artistic involvement and experience has no real place there. The cleverly-bought pictures become stocks and shares (and that only when they are sold); the art treasures used as signals of affluence become status symbols; the car designer is admired merely for his ability to make vehicles pretty and even then, the admiration is reserved for the selling qualities of

the prettiness. According to these criteria, it is the visual arts which are most useful. What use can we find for drama, music or dance? Maybe we should encourage the creative musician to compose chimes for ice-cream vans and the dramatist to frame nicely-phrased memoranda for factories and offices.

To those engaged in artistic activity, whether as creator or audience, the benefits are immediate, often non-verbal and in many ways self-justifying. To suggest that the arts are a smooth-running of economic activity is to debauch them and indicates a topsy-turvy view of life's value. I hope that Professor Galbraith will write another article showing how economics can support the arts. That would make some sense. Yours faithfully, WILLIAM SALAMAN, Lecturer in Music Education, University College, Cardiff.

### Psychology studied

Sir, - Carol Sherrard ("Psychology as a Cast of Mind", THESE, February 18) manages to include a non-verbal or an unsupported assertion in almost every sentence of her article. The total effect is, to me, so confusing that I should like to pick up just a few.

Psychology is often considered a science, and it does require application, but the relationship is not causal. Arts subjects are no less rigorous, difficult, and demanding. It does not follow that application is impossible if more than one subject is studied, nor that in that case the technical aspects cannot be taught. Even at GCE A level, where three subjects are commonly taken, psychology syllabuses include reasonably sophisticated experimentation.

Why should students on multi-subject courses necessarily have "broad theoretical social interests"? What about students on multi-subject science courses who may be taking (say) physics, biochemistry and psychology?

"Psychology" is a name for a group of studies. It is not an actor, and does not claim to analyse social issues. Some psychologists possibly may, but I should have thought most are more modest. Psychology as a discipline is not more or less disposed to reductionism than other disciplines, and I should have thought it was widely accepted that a complete account of behaviour requires analysis at least at the physiological, psychological, and social levels.

The query as to whether a first single-subject degree gives mastery is baffling. In absolutely any subject the answer is yes and no. Any first degree implies some measure of competence, and any one can be followed by further study. It would be interesting to know on what the general statement about the nature of single-subject teaching (nystifying, etc.) is based.

I hope this does not sound unduly severe. Carol Sherrard's experiences at Bradford may well have provided useful lessons for the teaching of psychology, but they do not emerge in her article. Yours faithfully, JOHN RADFORD, Dean of Faculty of Science, North East London Polytechnic.

Their report is expected around May but they have already decided there should be a British Accreditation Council for Independent Further and Higher Education, with the inevitable acronym BAC.

The prestige of the organization supporting such a scheme should draw in a great many colleges. There could be a bandwagon effect. Once inspections were under way the money would start coming in and the scheme could become self-financing. But, for the early months, the funds would need to be needed, the sum of about £10,000 for the first year. This is where the DES should step in. There must be no long-term financial commitment for the Government, but it ought to put up the initial funds. In return the Secretary of State could appoint the chairman and an assessor. The DES played a similar role in the launch of the Council for the Accreditation of Correspondence Colleges in 1969. If the Government seriously believes in the private sector, it should follow its predecessor's example.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend them, if necessary.

Game theory Sir, - Several errors and misunderstandings were perpetrated by Alan Grafen in his review of John Maynard Smith's *Evolution and the Theory of Games* (THESE, February 18).

According to Grafen, "the theory of games was formulated mathematically by von Neumann and Morgenstern in 1922", and "the idea behind the ESS (evolutionarily stable strategy) was used in 1930 by R. A. Fisher in relation to sex ratios, before game theory itself was invented". This is all wrong. It is like suggesting that the idea behind the bicycle preceded the invention of the wheel. In fact, the basic concepts of game theory in its modern (strategic) form were well understood by the late 1920s, and von Neumann proved the fundamental theorem in 1928. (The book by von Neumann and Morgenstern first appeared in 1944, not 1952.) R. A. Fisher was of course not ignorant of game theory: he independently proved a less general version of the fundamental theorem in 1934.

Grafen claims that game theory was formulated to represent the competitive behaviour of human beings each pursuing their own self-

ish motives with complete rationality. Unfortunately (for the theory) human beings are frequently unselfish and irrational. There are at least three debilitating misconceptions here. First, a large part of game theory - and most of von Neumann and Morgenstern's book, incidentally - is devoted to games that are not strictly competitive, and the games discussed by Maynard Smith are all mixed-motive (partly cooperative and partly competitive). Second, there is (fortunately for the theory) no assumption that people's motives are completely selfish: games can be (and have been) used to model interactions between completely altruistic players. Third, the theory seeks to discover how rational decision makers ought to behave in order to maximize their (selfish or altruistic) objectives; the circumstances in which ordinary people or animals actually do behave rationally in everyday strategic interactions is a purely empirical question, and one that has received a lot of attention from researchers in recent decades.

Yours sincerely, ANDREW COLMAN, Department of Psychology, University of Leicester.

### Leicester dispute

Sir, - "Personality clash stops talks" (THESE, February 25), shock horror! Your paper is the last I would expect to resort to the cheap sensationalist tactics of the tabloids. The entire article about a current dispute between the National Association of Teachers in Further and Higher Education and the management at Leicester Polytechnic is both tendentious and based on a number of fundamental errors. I would now like to take this opportunity to set the record straight.

The dispute is not about a "personality clash" but a fundamental issue of principle. In short, trade unions are entitled to decide who represents their members in negotiations. This right is not subject to the whim of arbitrary management. It is, precisely on this point, and the obduracy of management in failing to recognize it, that talks have broken down.

Secondly, the letter from our regional official, which Mr Bethel has chosen to take issue with in a fit of pique arising from new found sensitivity, was neither "rude" nor "based on ignorance". The letter was sent following a meeting between our regional official and Natfhe members in receipt of the select "invitation" for premature retirement. Many of those members were extremely angry about the tone and content of the so-called "invitation". Indeed, for most, it came as a kick in the teeth after many years of loyal and exemplary service to the polytechnic. If rudeness and insensitivity has been a feature of the current dispute, then it has come from one quarter only.

Thirdly, there are several incorrect and totally false statements in the article which I would have thought your journalists should have been duty bound to check with Natfhe, before publishing them as Holy writ. Contrary to the statement attributed to Mr Bethel, Natfhe was not "fully

appraised of the situation". It is precisely because of the failure on the part of management to keep us fully informed that talks were called for in the first place. Similarly, the majority of staff who received the premature retirement "invitation" are Natfhe members. In my view, 33 out of 53 constitutes a majority. Clearly, educationalists' concern about numbers should not be directed solely to school leavers. Finally the Association of Polytechnic Teachers does not have negotiating rights at the polytechnic nor is it a "rival" to Natfhe. The vast majority of teaching staff regard the APT as a joke and this is reflected in the relative size of the two organizations at the polytechnic.

Yours faithfully, M. PACK, Chairman, City Campus Branch, National Association of Teachers in Further and Higher Education, Leicester Polytechnic.

### Nautical studies

Sir, - I would like to bring your attention to misleading statements appearing in an article headed "Vocational studies: the college boat" (THESE, February 11).

The last paragraph of the article states that "the five largest centres for advanced training for ship's mates and captains are the ones in Southampton, South Shields, Plymouth, Liverpool and Fleetwood, counting the three in Scotland. The smaller centres include: Humber College of Higher Education; City of London Polytechnic; Lowestoft College of Further Education; Brunel Technical College, Bristol; South Glamorgan Institute of Higher Education and Ulster Polytechnic."

It is a gross error to suggest that Fleetwood is one of the five largest

### Standards at risk

Sir, - Your leader, "Quality or opportunity?" (THESE, February 25), does not make clear that if the public sector were to accept a lower unit of resource, the academic standards of qualifications offered by the polytechnics and colleges would be seriously at risk.

It is a requirement of the Council for National Academic Awards that degrees validated by the council be of a standard at least equivalent to those of comparable university degrees. If the public sector were operating at a unit of resource marginally lower than the universities, it might be reasonable to increase staff-student ratios in that sector in order to accommodate more students within a fixed level of resource, provided there were to be a corresponding increase in less costly support services. However, the cost per student in the public sector, exclusive of fees, in 1983/84 will be £2,500 per full-time equivalent, while the corresponding figure in the universities will be £4,000.

This disparity of provision not only leads to higher SSRs (currently approximately 10.5 in the polytechnics compared to 9.3 in the universities) in the public sector, but results in an inadequate provision of support staff, e.g. librarians, technicians, computer staff, etc. In recent years polytechnic and college qualifications have gained increasing respect from industry, schools and students. This is in no small measure due to the scrupulous attention these institutions have given to validation requirements.

It is my view, and apparently the view of the Parliamentary Under-Secretary of State, that the universities were entirely right to maintain their unit of resource in order to protect their internationally recognized academic standards. Equally, it would be a disservice, however well intentioned, to both existing and potential students if the hard won recognition of public sector qualifications were to be put in jeopardy by increasing student intakes without increasing resources.

Yours faithfully, DR RAYMOND RICKETT, Director, Middlesex Polytechnic.

## Union View

### A challenge that must be accepted

All young people not remaining in full-time education at 16 - including those who would otherwise have received further education through day or block release - will, from next month, be eligible for the Youth Training Scheme. The YTS, which includes at least 13 weeks off-the-job training/education, therefore presents further education with a challenge and an opportunity - the chance to provide for all young people an educational package which they will perceive as relevant to their needs. The opportunity must be grasped and turned into reality. The best interests of young people will be served by further education making that effort. Through its quality of teaching and care, the service ought to seek to ensure that the 13 weeks are used to the advantage of trainees.

It would not be in the interests of trainees for further education to succumb to the strident negativism which is now appearing in a number of places. (And if it does, it will have only itself to blame should the YTS off-the-job element become totally privatized.)

Of course, without massive youth unemployment the Government would probably not be funding the YTS. But attacks on government policies ought to be made through political activity designed to ensure, via the ballot box, the adoption of an alternative economic strategy. They ought not to be made by denying the needs of trainees on the YTS. That would be to abrogate further education's responsibility.

## natfhe

Now the involvement of further education in YTS in the interests, and on the side, of trainees is not an unceremonious blank cheque. There are many criticisms. The YTS is seriously under-resourced - and not significantly better resourced than the Youth Opportunities Programme. Not only is direct resourcing inadequate: funds available for materials, equipment and staff development are hopelessly insufficient. And quite insufficient attention is being given to the destruction of remaining jobs for 16-year-olds; of job substitution; of the depression of youth (and thereby adult) wages; and of employers using the YTS as a screening device for their own recruitment, which will only be averted by trade unions exercising vigilance, through representatives on area manpower boards.

There is also widespread concern, unless educational grants at sufficiently high levels are made available to young people, that the determination of how best to meet their needs will be distorted by financial barriers. Other issues remain to be resolved: of progression/transfer from the YTS to other education and/or training provision; of certification and assessment; and of the content of the common core. Moreover, although the YTS has the potential for advancement, what is really needed is a two-year quality programme of vocational preparation for all school-leavers who do not continue in full-time education to the age of 18.

But now, immediately, the needs of trainees within the YTS are there to be met. For anyone to argue that further education should refuse to meet these would be to seek to use young people as political pawns.

Mick Farley

The author is assistant secretary of the National Association of Teachers in Further and Higher Education.

Yours faithfully, D. R. DERRETT, Head of nautical studies, Humber-side College of Higher Education.